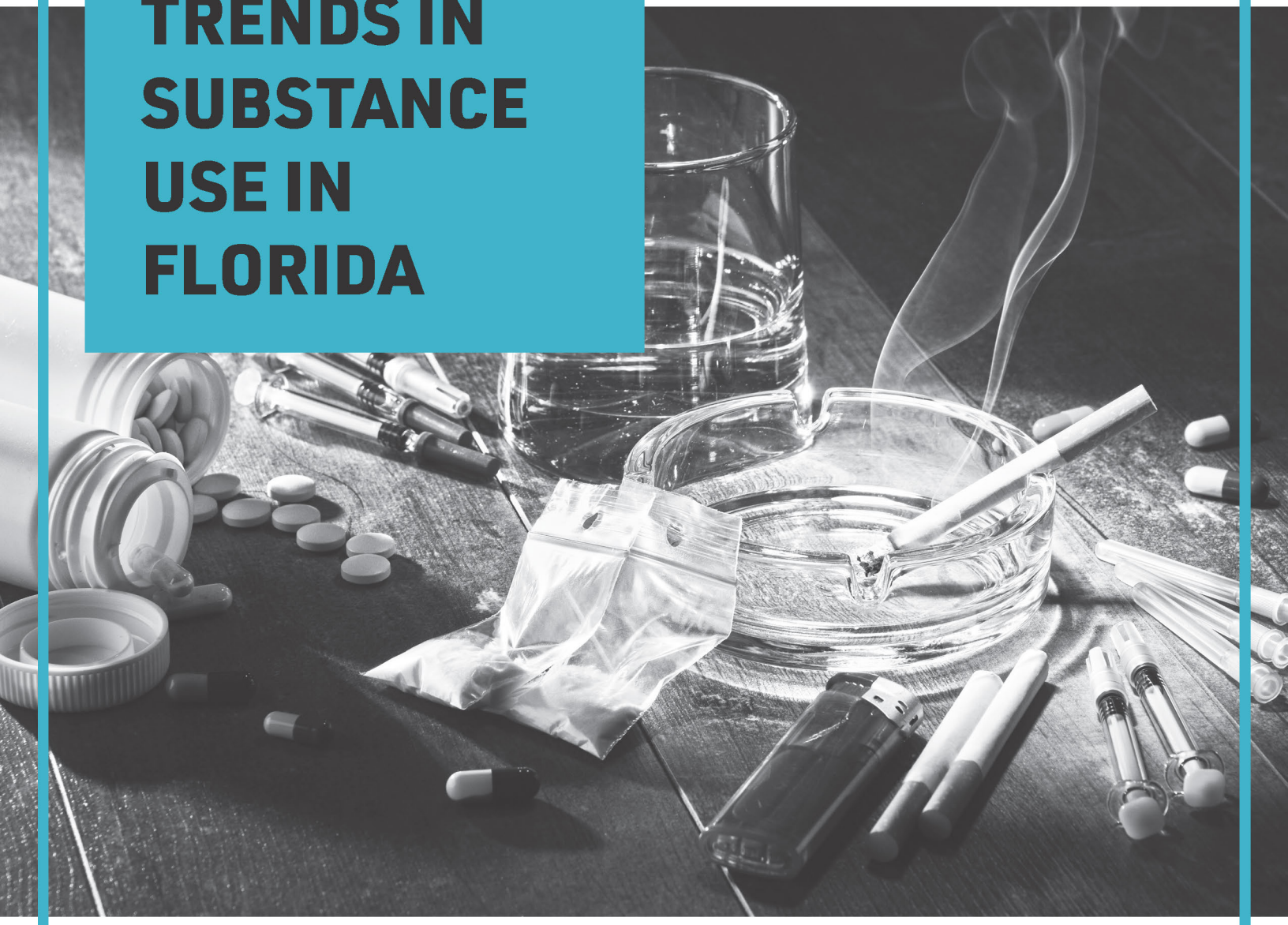
Annual Report 2023

PATTERNS OF AND TRENDS IN SUBSTANCE USE IN FLORIDA



FADAA

FLORIDA DEPARTMENT OF CHILDREN AND FAMILIES

Sponsored by FADAA, 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. (2023) Patterns of and Trends in Substance Use in Florida 2023 Annual Report.

Table of Contents

Introduction

The 2023 Annual Report presents new information about substance use in Florida and the U.S. since the release of the 2022 Annual Report Update, Patterns and Trends of Substance Use Within and Across the Regions of Florida, in February 2023. It includes additional 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: 2021 Annual Report. For purposes of this analysis, data from the 2021 National Survey on Drug Use and Health (NSDUH), the 2022 Florida Youth Substance Abuse Survey, and Monitoring the Future were also used. 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. NSDUH state estimates are based on two years of combined date. However, preliminary estimates are based on a single year of data. Changes to survey methodology in 2021 mean the data cannot be combined with previous years. Due to this, there is a greater variance around the estimates than for the usual two-year estimates. Two-year estimates that combine 2021 and 2022 will be available after the 2022 data release.

A Note on 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.

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).

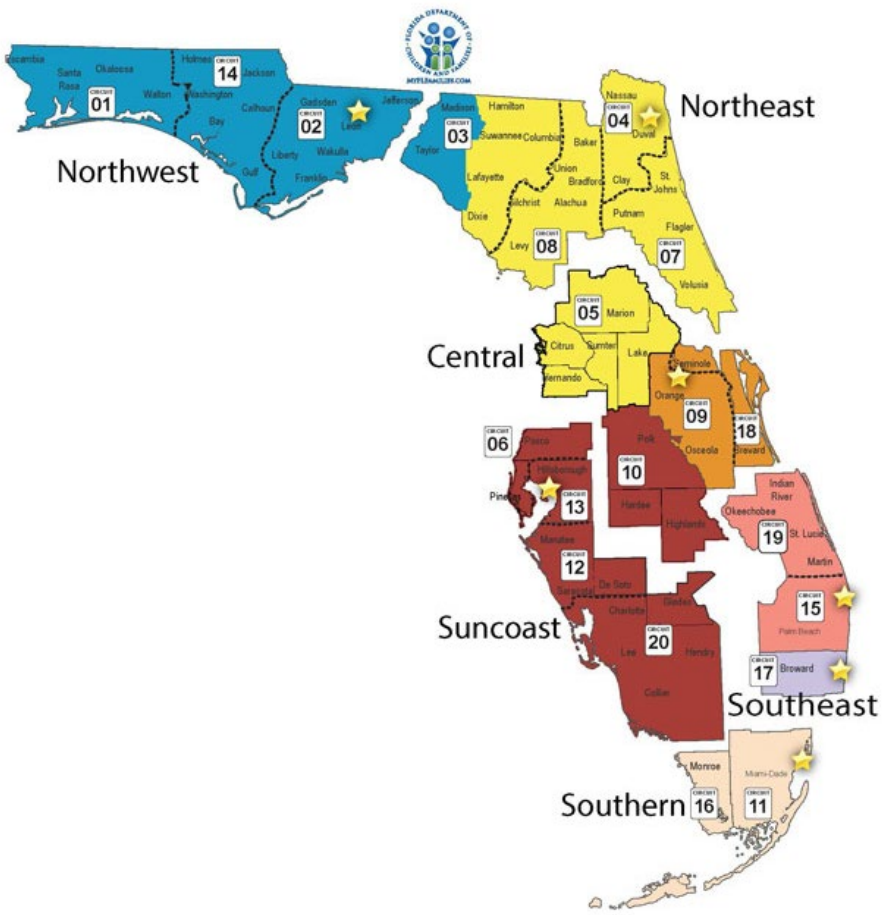


Figure 1. Florida by Department of Children and Families Region, Managing Entity, Circuit, and County. Source: Managing Entities, Florida Department of Children and Families.

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.

Methodology

Data presented in the 2023 Annual Report were obtained from the following sources.

Florida county population data and estimates from 2000 to 2023 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).

The Florida Youth Substance Abuse Survey (FYSAS) assesses risk and protective factors for substance use and is administered to Florida's middle and high school students. FYSAS data from 2010-2022 was used to calculate prevalence rates for this analysis.

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 most current data from NSDUH is from 2021.

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.

In 2021, NSDUH state data tables provide estimates for 35 measures of substance use and mental health by age group. Due to methodology changes, they cannot be compared to previous years' estimates.

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, provided by Florida Department of Health and maintained by Florida's 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 the Florida Department of Health, Florida Health Charts and population estimates from the Florida Estimates of Population, Population Studies Program.

Mortality rates for Florida and the United States from 2006 to 2021 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 2022 was 22,276,132 (Figure 2).

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.

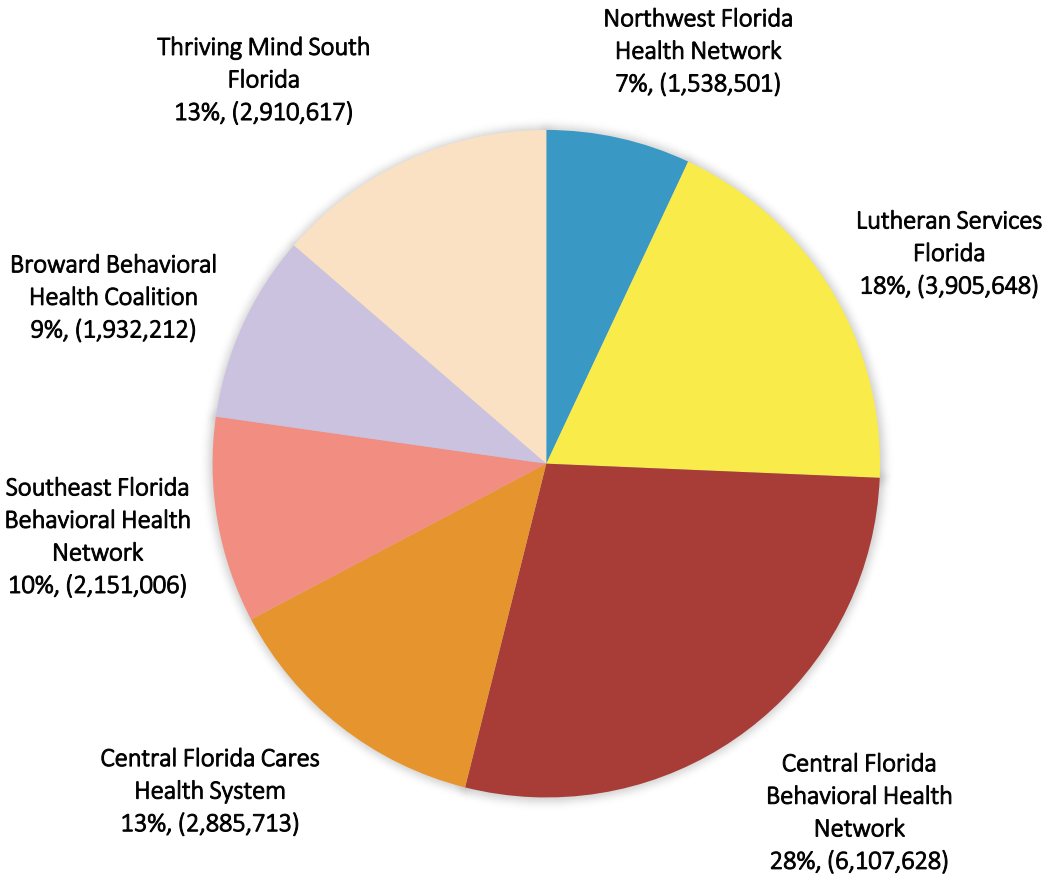


Figure 2. Estimated population by Managing Entity Region, Florida, 2022. Total Population = 22,276,132. Source: FL BEBR.

Substance Use

Substance use is common although 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 misused and/or can result in substance use disorder. For comparison, data for various substances are shown for Florida, alongside the prevalence in the United States as a whole. 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 3.2% and 2.5%, respectively for 2021 (Figure 3). The 2021 results show that the prevalence rate of pain reliever misuse is the lowest it has been in the U.S. and Florida.

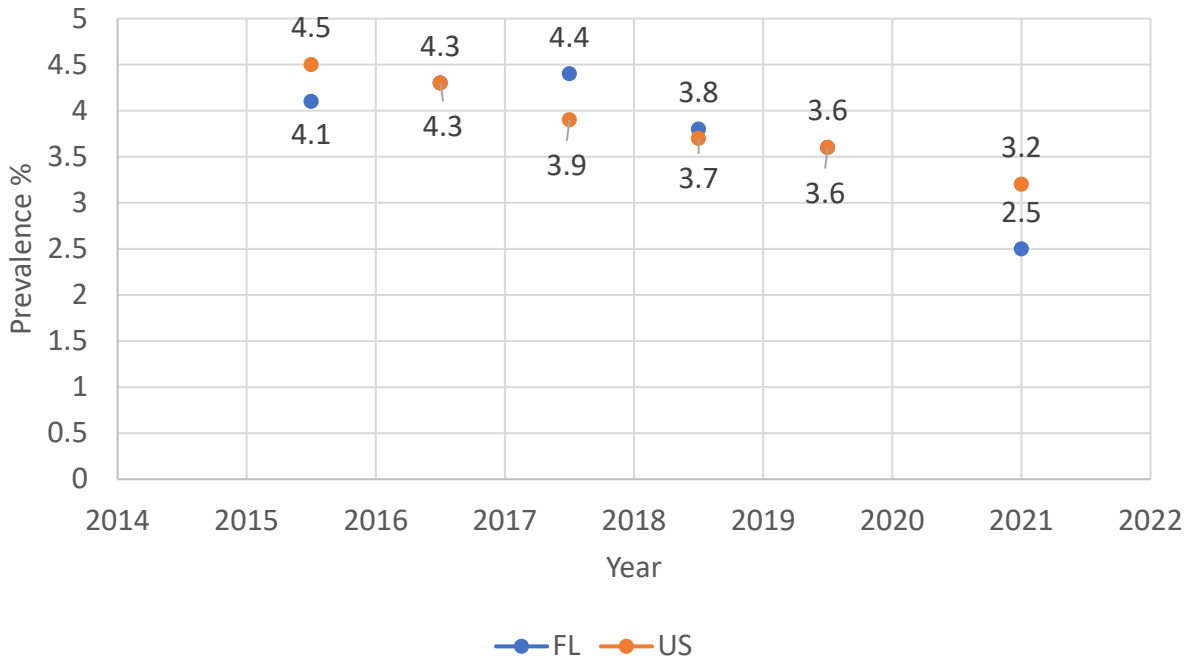


Figure 3. Two-Year Average Past-Year Pain Reliever Misuse Among Adults, United States and Florida, 2015–2021. Source: NSDUH.

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. However, without the two-year averages for 2021, NSDUH survey results indicate that U.S. and Florida youth demonstrated an increase in misuse of pain relievers at 2.2% versus 1.9% respectively (Figure 4). Results from the national 2022 Monitoring the Future survey of 8th, 10th, and 12th grade students show a slight increase among 12th graders for use of narcotics other than heroin (including Vicodin, OxyContin, Percocet).

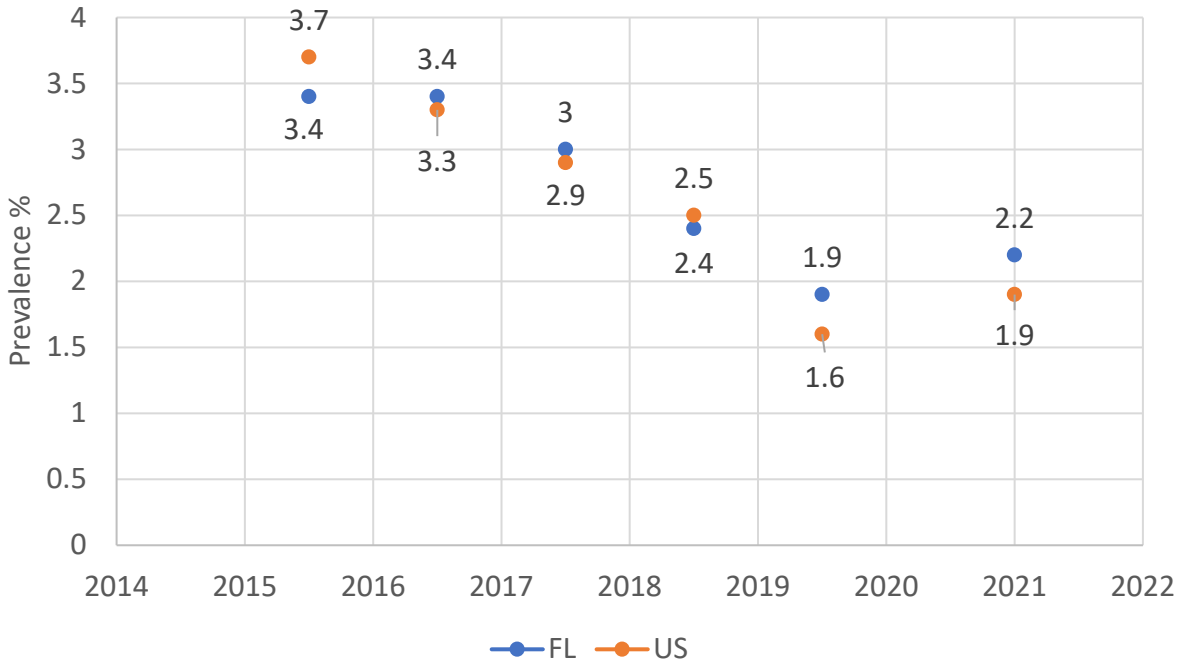


Figure 4. Two-Year Average Past-Year Pain Reliever Misuse Among Youth, United States and Florida, 2015–2021. Source: NSDUH.

The Florida Youth Substance Abuse Survey (FYSAS) assesses risk and protective factors for substance abuse in addition to substance abuse prevalence. The most current According to 2022 FYSAS data, both lifetime and past 30-day pain reliever misuse has decreased among Florida middle and high schoolers since 2010. Past 30-day misuse is now at 1% while lifetime misuse has fallen under 3% in 2022. That is an overall 60% decrease in lifetime misuse of pain relievers among Florida youth since 2010 (Figure 5). Prevalence rates from lifetime and 30-day misuse of pain relievers among the Managing Entities are distributed in Figure 6. Lifetime and 30-day pain reliever misuse was highest among adolescents in the Lutheran Services Florida and Northwest Florida Health Network regions.

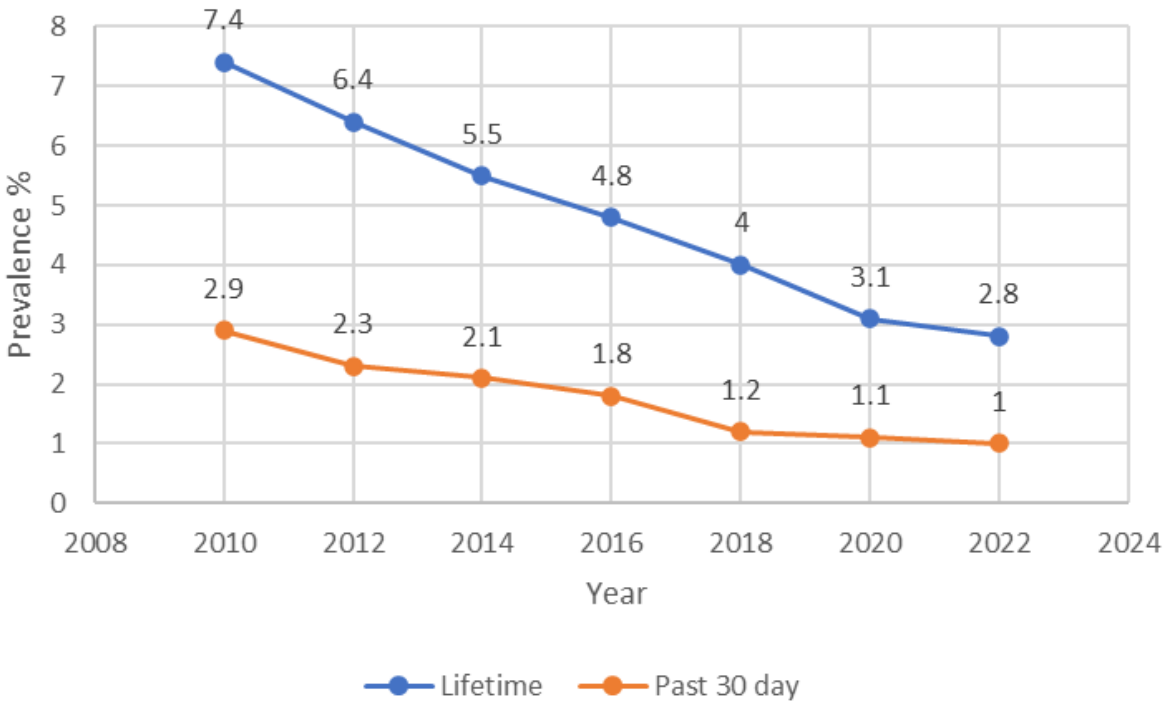


Figure 5. Lifetime and Past 30-day Pain Reliever Misuse Among Youth in Florida, 2010–2022. Source: FYSAS.

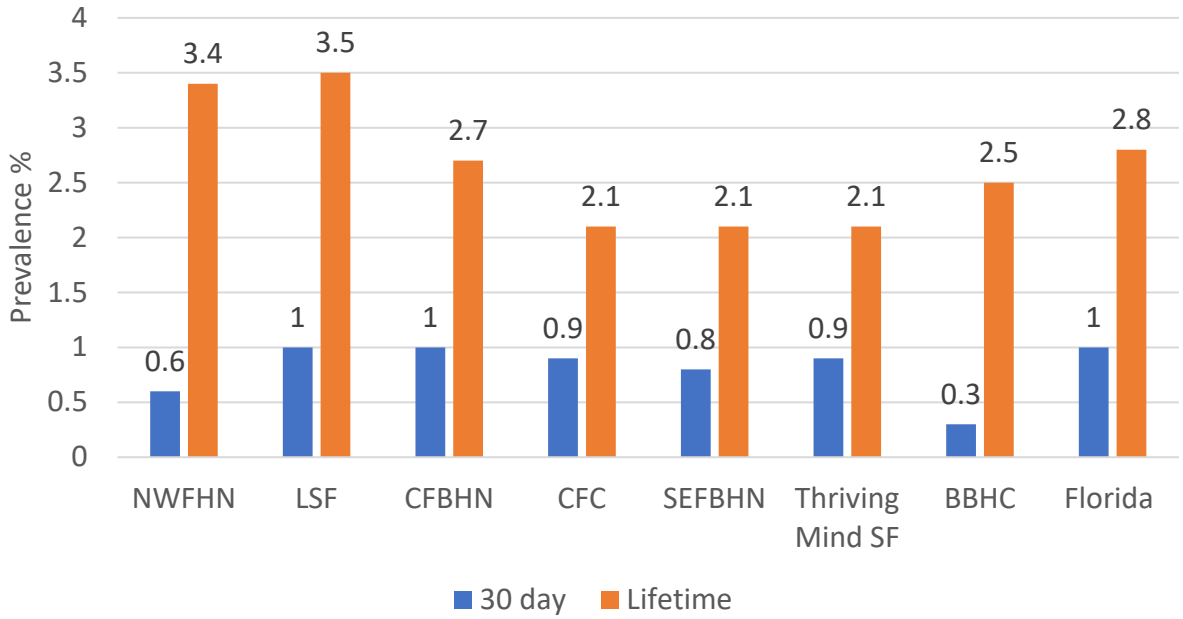


Figure 6. Lifetime and Past 30-day Pain Reliever Misuse Among Youth in Florida by Managing Entity, 2022. Source: FYSAS.

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 7). 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, 2019-2020, and again in 2021 at 0.4%. The prevalence of heroin use among adults in Florida has been consistently lower than that of the nation. However, there was an increase in past year heroin use of 0.3% by adults in 2021.

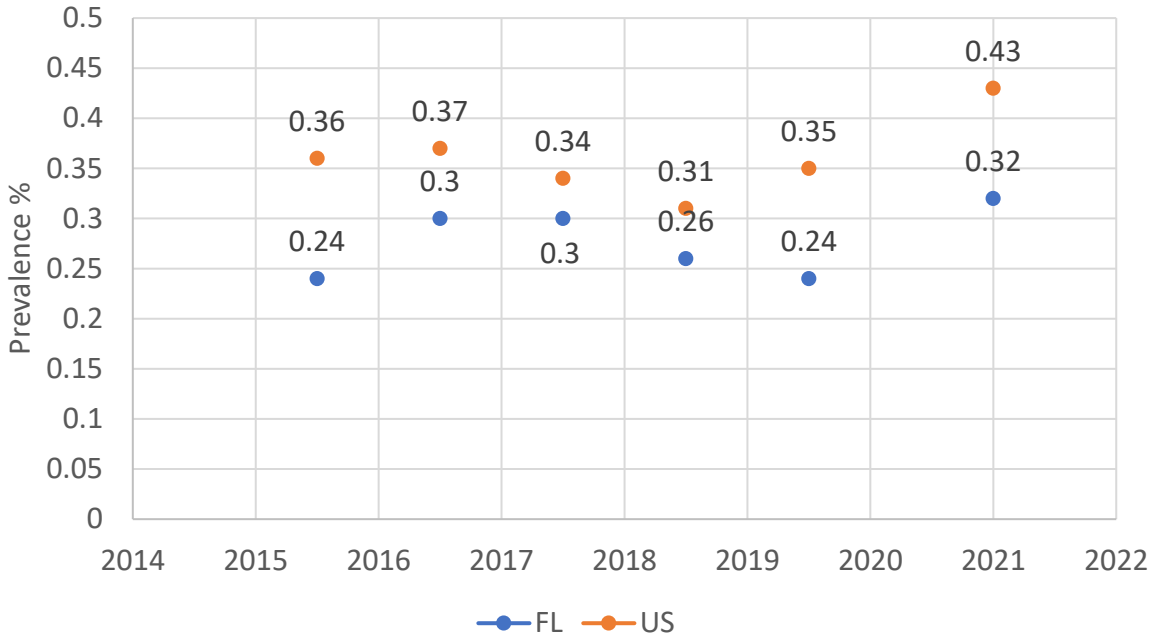


Figure 7. Two-Year Average Past-year Heroin Use Among Adults, United States and Florida, 2015 – 2021. Source: NSDUH.

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 U.S. and Florida (Figure 8). Note: 2019-2020 and 2021 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.

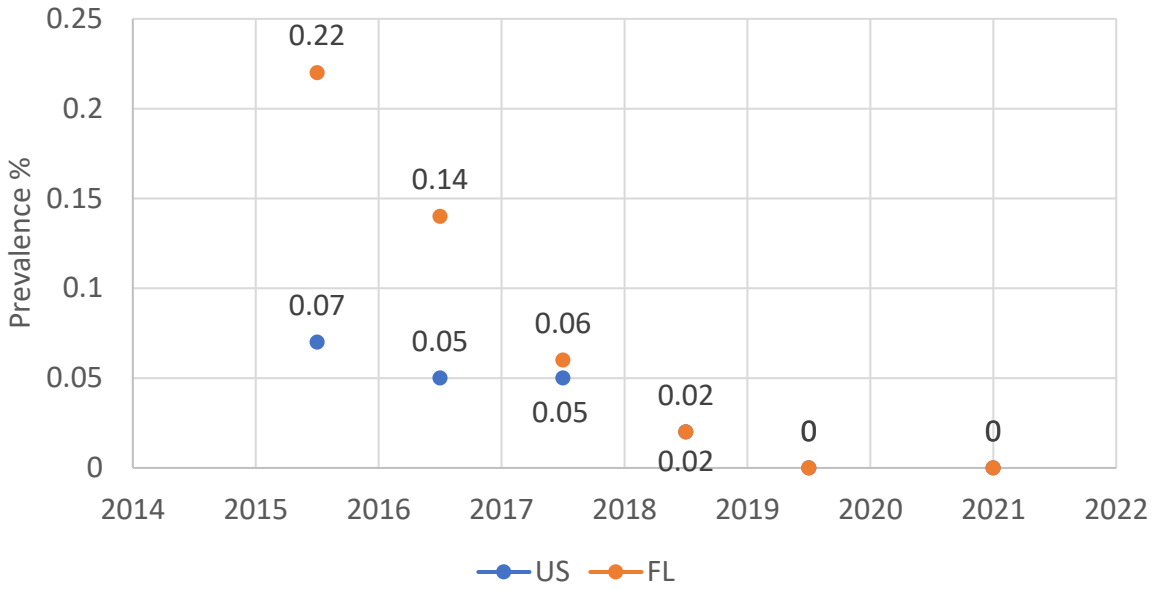


Figure 8. Two-Year Average Past-year Heroin Use Among Youth, United States and Florida, 2015 – 2021. Source: NSDUH.

According to the FYSAS, lifetime and past 30-day heroin use among youth in Florida has decreased since 2010 (Figure 9). Although lifetime and past 30-day heroin use increased in 2020, the rates either decreased or remained stable in 2022. Among the Managing Entities, Northwest Florida Health Network had the highest lifetime use of heroin among youth at 0.5% but also had one of the lowest rates for past 30-day use of heroin (Figure 10).

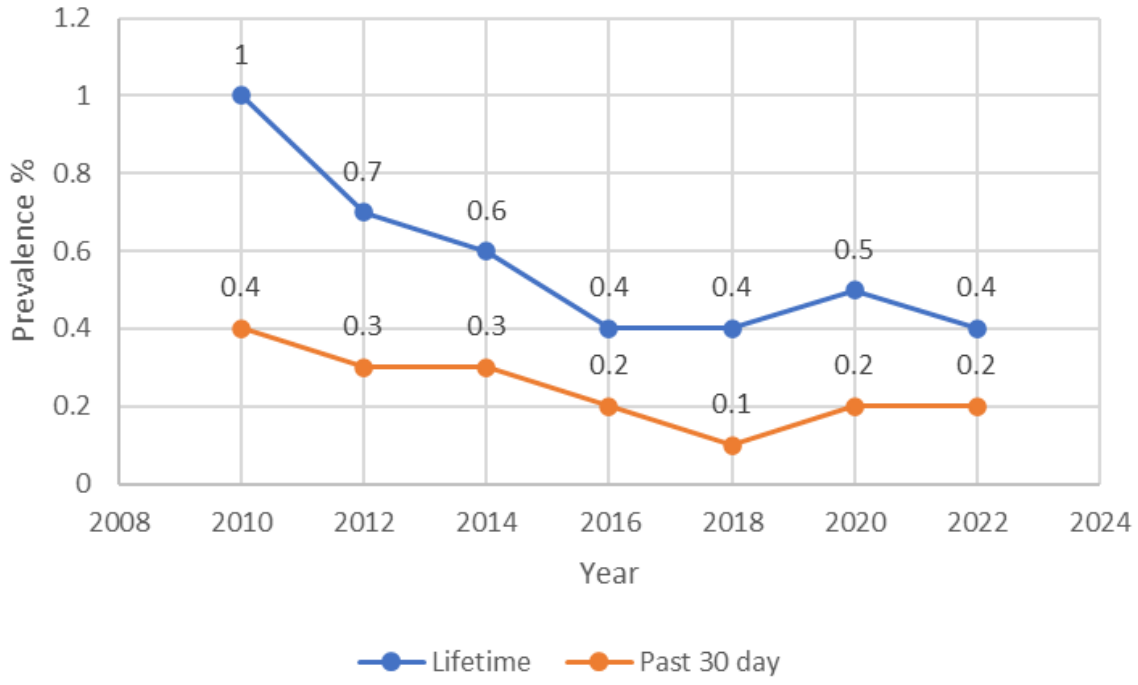


Figure 9. Lifetime and Past 30-day Heroin Use Among Youth in Florida, 2010–2022. Source: FYSAS.

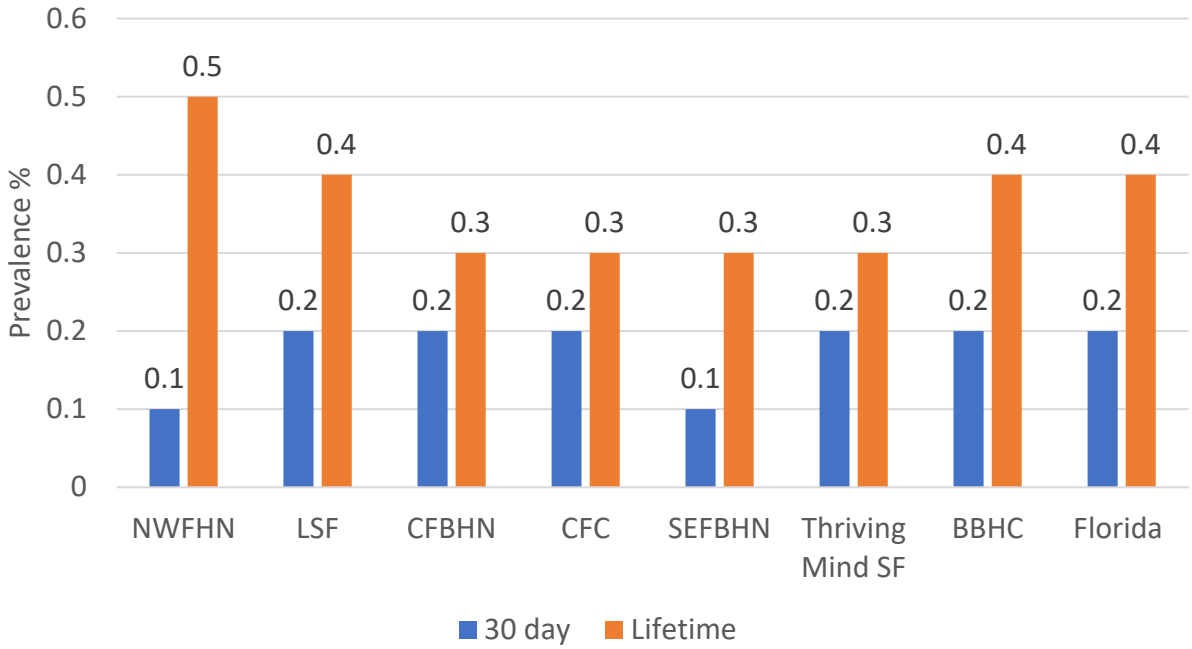


Figure 10. Lifetime and Past 30-day Heroin Use Among Youth in Florida by Managing Entity, 2022. Source: FYSAS.

Psychostimulants

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 1.4% of adults in Florida endorsed the use of cocaine in the past year, slightly lower than that of the nation at 1.8% (Figure 11). This is also a continuous decrease in past year cocaine use among adults since 2017-2018 for both the nation and Florida.

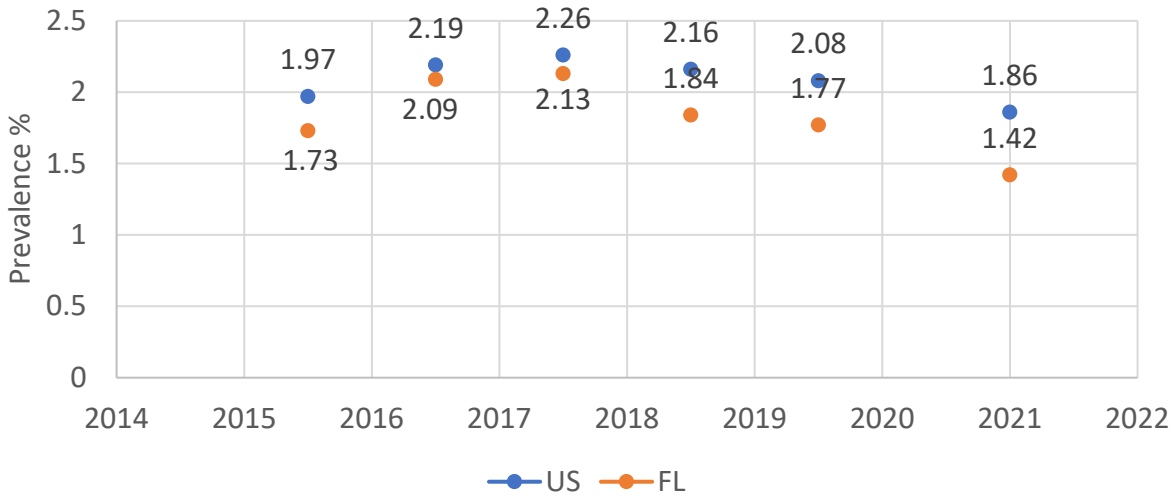


Figure 11. Two-Year Average Past-year Cocaine Use among Adults, United States and Florida, 2015 – 2021. Source: NSDUH.

Cocaine Use Among Youth

The prevalence of past-year cocaine use among U.S. and Florida youth decreased for another year, narrowing the rates between the U.S. and Florida with 0.15% and 0.13% respectively (Figure 12). Lifetime and past 30-day use has decreased among Florida youth since 2010 and continues to decrease based on 2022 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 13). Among the Managing Entities, youth in the Northwest Florida Health Network region reported the highest rate of lifetime and past 30-day use of cocaine while the Broward Behavioral Health Network region showed the lowest prevalence rates for both lifetime and past 30-day use (Figure 14).

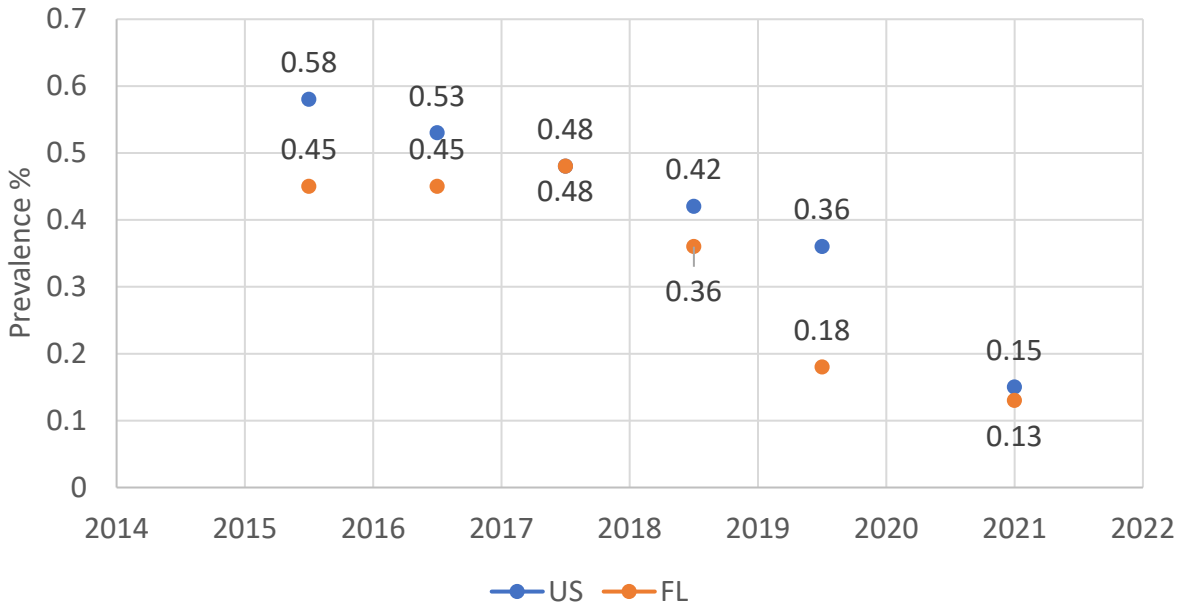


Figure 12. Two-Year Average Past-year Cocaine Use Among Youth, United States and Florida, 2015 – 2021. Source: NSDUH.

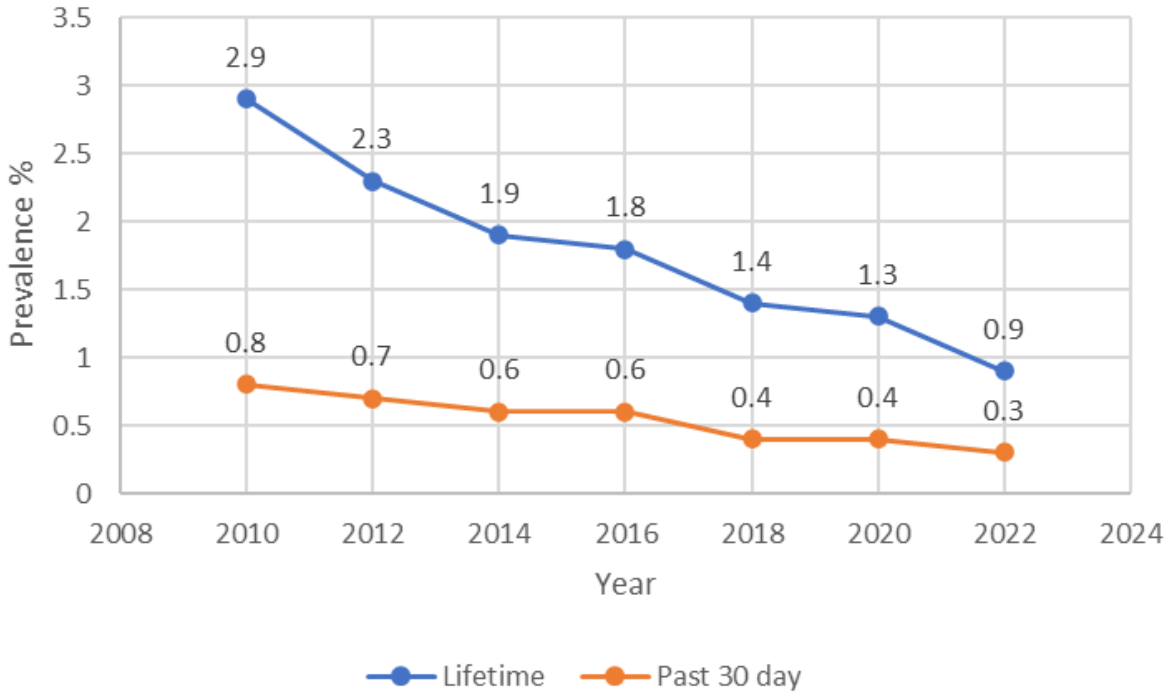


Figure 13. Lifetime and Past 30-day Cocaine Use Among Youth in Florida, 2010–2022. Source: FYSAS.

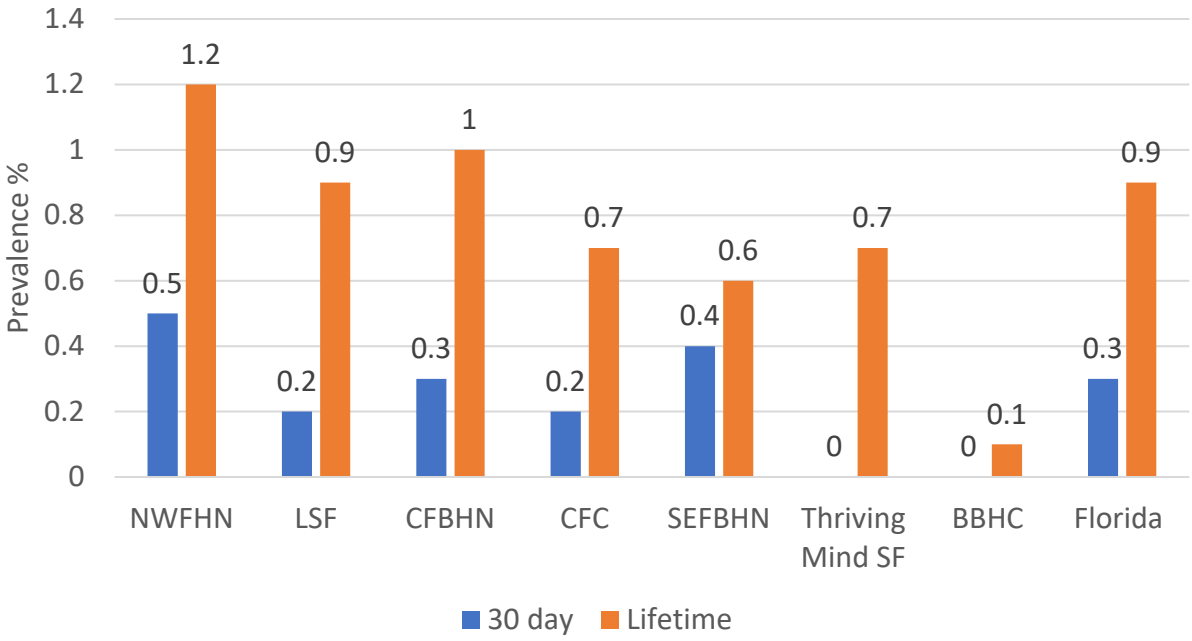


Figure 14. Lifetime and Past 30-day Cocaine Use Among Youth in Florida by Managing Entity, 2022. Source: FYSAS.

Methamphetamine Use Among Adults

Use of methamphetamine among adults across the nation has increased slightly since the 2016-2017 two-year averages of 0.60% compared to the most recent survey data with just under 1% for U.S. adults (Figure 15). Methamphetamine use among adults in Florida declined in 2021 with 0.56% of Floridians endorsing methamphetamine use.

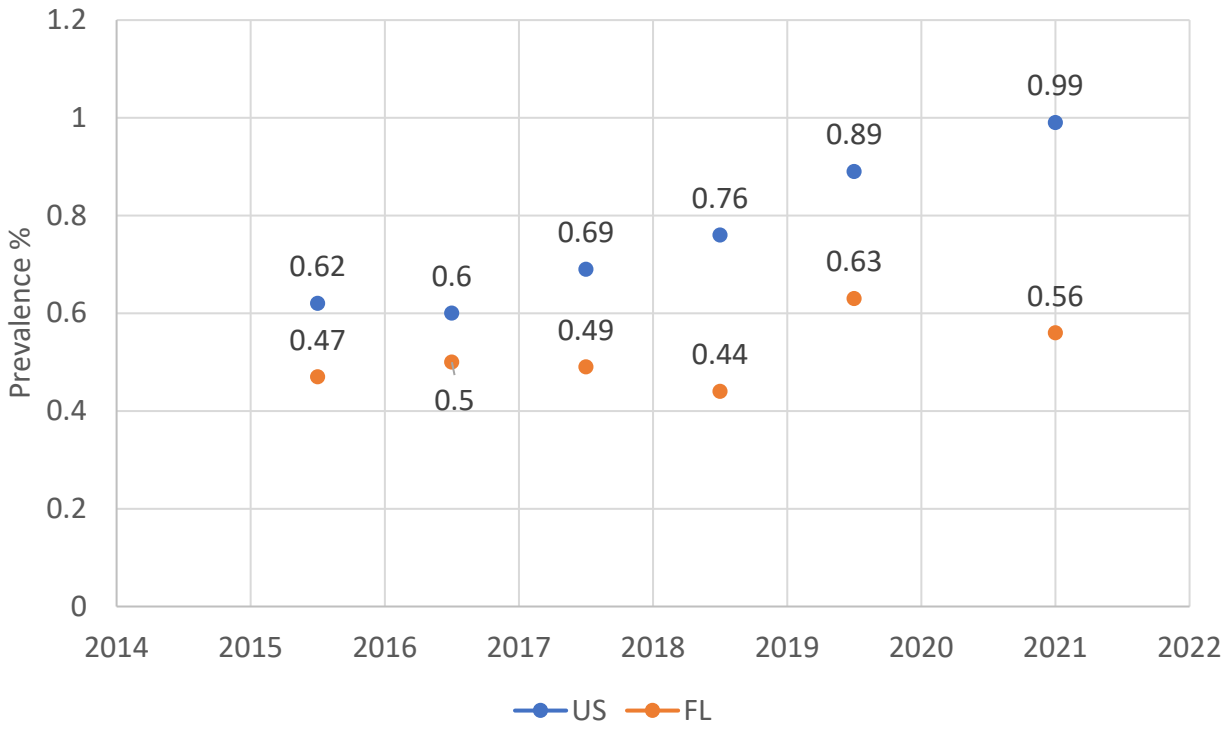


Figure 15. Two-Year Average Past-year Methamphetamine Use Among Adults, United States and Florida, 2015–2021. Source: NSDUH.

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 2015-2018. However, after 2017-2018, prevalence decreased for U.S. and Florida adolescents. The most recent data shows a slight increase to 0.15% for U.S. youth and 0.13% for Florida youth (Figure 16). 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 2022 (Figure 17). Northwest Florida Health Network had the highest lifetime use of methamphetamine among the Managing Entities while Thriving Mind South Florida had the lowest rate for past 30-day use of methamphetamine (Figure 18).

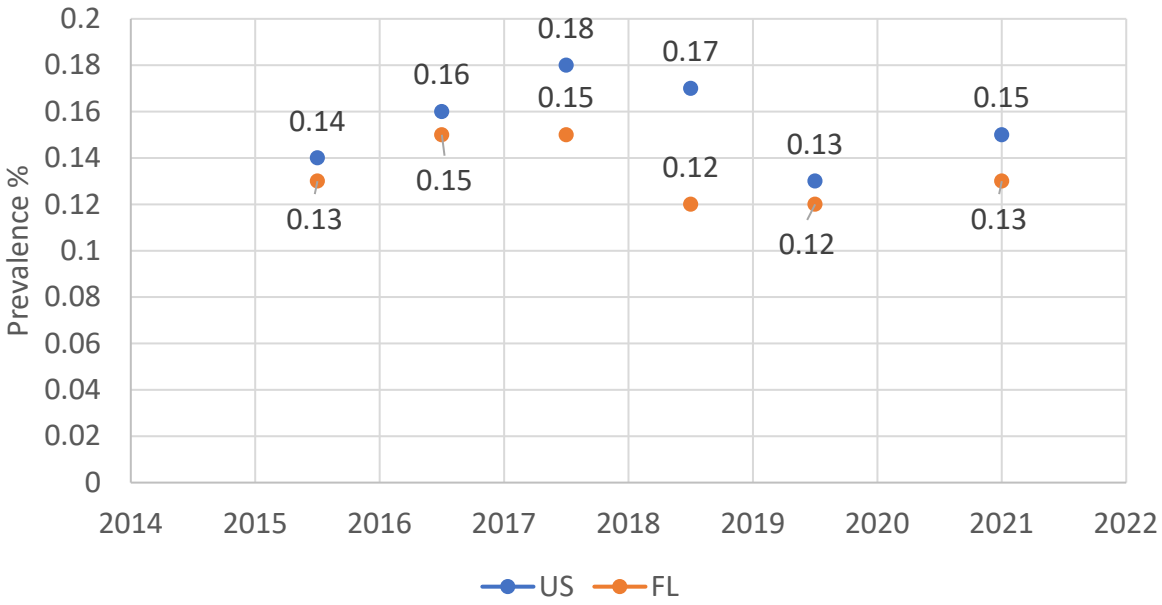


Figure 16. Two-Year Average Past-year Methamphetamine Use Among Youth, United States and Florida, 2015–2021. Source: NSDUH.

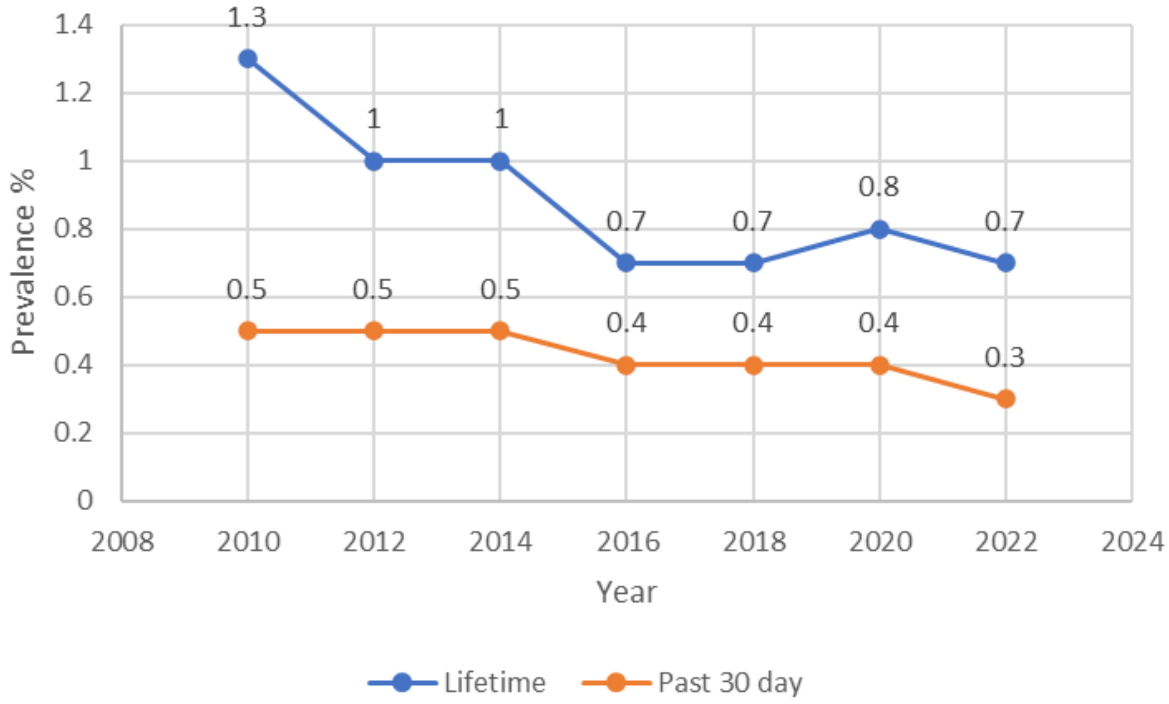


Figure 17. Lifetime and Past 30-day Methamphetamine Use Among Youth in Florida, 2010–2022. Source: FYSAS.

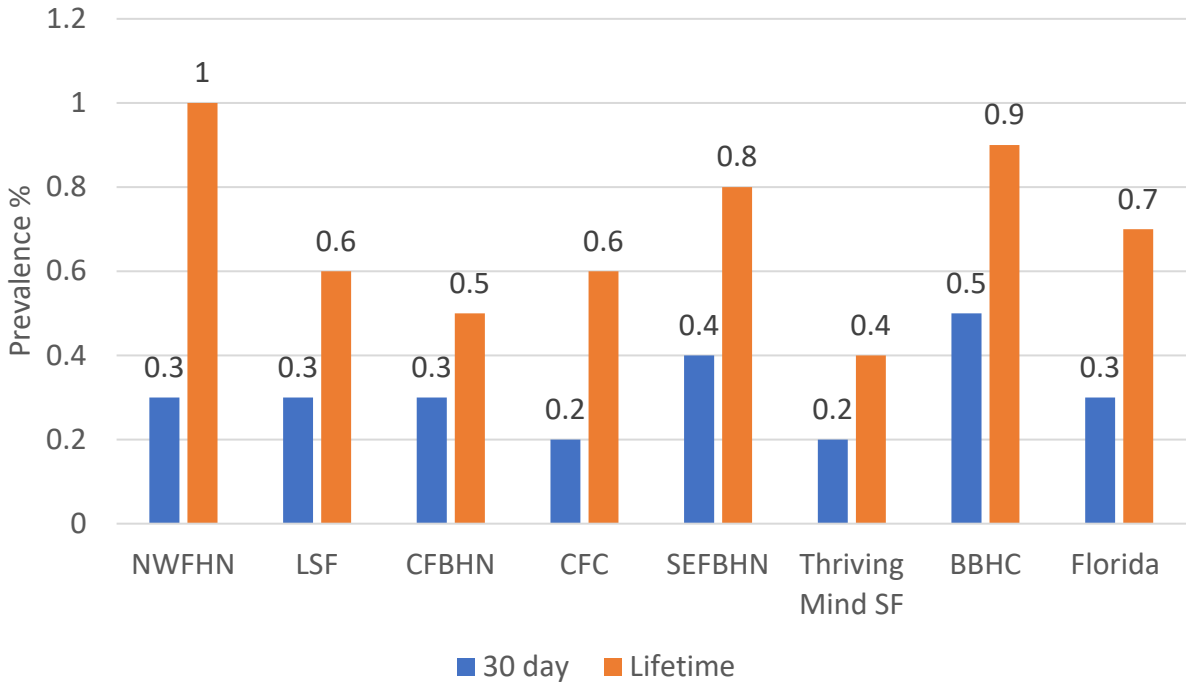


Figure 18. Lifetime and Past 30-day Methamphetamine Use Among Youth in Florida by Managing Entity, 2022. Source: FYSAS.

Marijuana

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 and health (NIDA, 2019).

Marijuana Use Among Adults

Marijuana is the only substance to continually increase in past-year and past-month use among adults in the U.S. However, Florida has recently experienced a decline in cannabis use. Nationally, past-year use of marijuana is nearing 20% while 15.4% of Florida adults endorsed marijuana use in the past year (Figure 19). Second to only alcohol among substances covered in this report, 11.2% of adults in Florida and 13.7% of adults across the nation endorsed using marijuana in the past month (Figure 20).

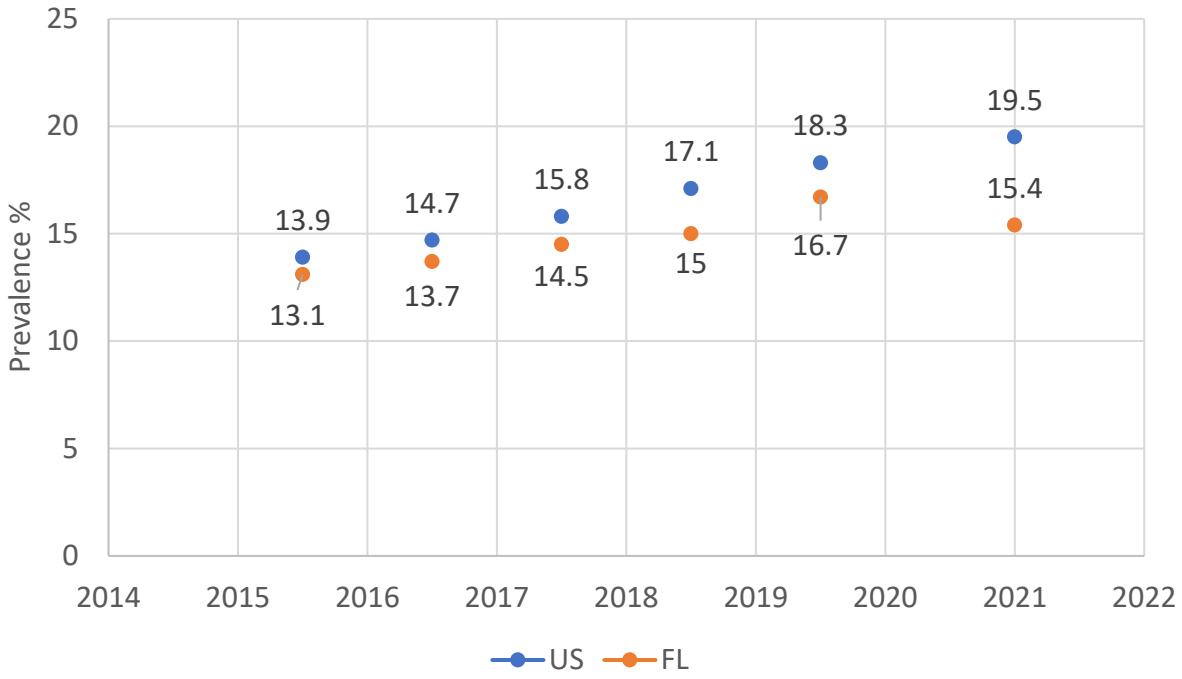


Figure 19. Two-Year Average Marijuana Use Among Adults, Past Year, United States and Florida, 2015–2021. Source: NSDUH.

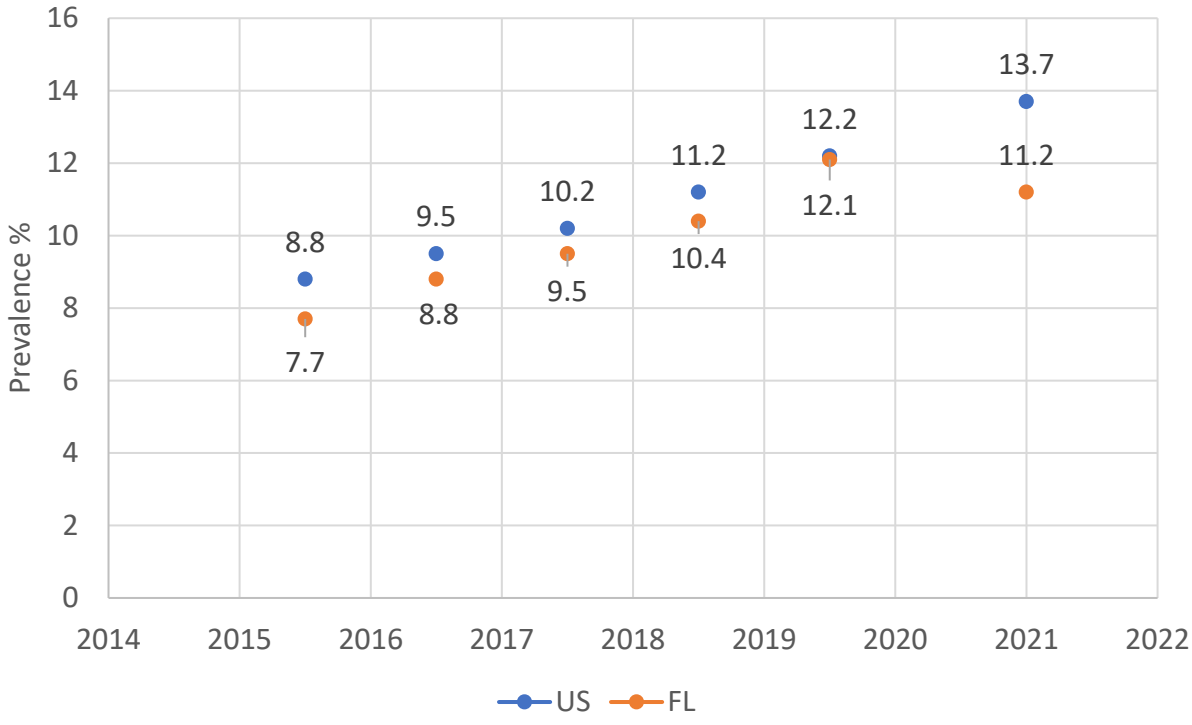


Figure 20. Two-Year Average Marijuana Use Among Adults, Past Month, United States and Florida, 2015–2021. Source: NSDUH.

Marijuana Use Among Youth

Past-month and past-year marijuana use among youth has been slowly decreasing over time (Figure 21 and Figure 22). Past-year marijuana use among Florida youth has decreased by 2% from the 2016-2017 two-year average to the 2019-2020 two-year average. Additional decreases in rates occurred in 2021 with 10.4% for U.S. youth and 9.3% for Florida youth (Figure 21). Similarly, past month use among Florida youth has decreased during the same time frame (Figure 22). Based on data from the Florida Youth Substance Abuse Survey, (Figure 23). the prevalence of both lifetime and past 30-day use among Florida youth has continually decreased from 2010 to 2022, falling from 23.8 to 16 for lifetime use and 13 to 8.3 for past 30- day use. Among the Managing Entities, three regions had higher reported lifetime and past 30-day rates than the statewide average while Broward Behavioral Health Network had some of the lowest rates for both lifetime and 30-day use (Figure 24). The national Monitoring the Future survey for 8th, 10th, and 12th grade students, shows that past year marijuana use remained stable for all three grades surveyed in 2022.

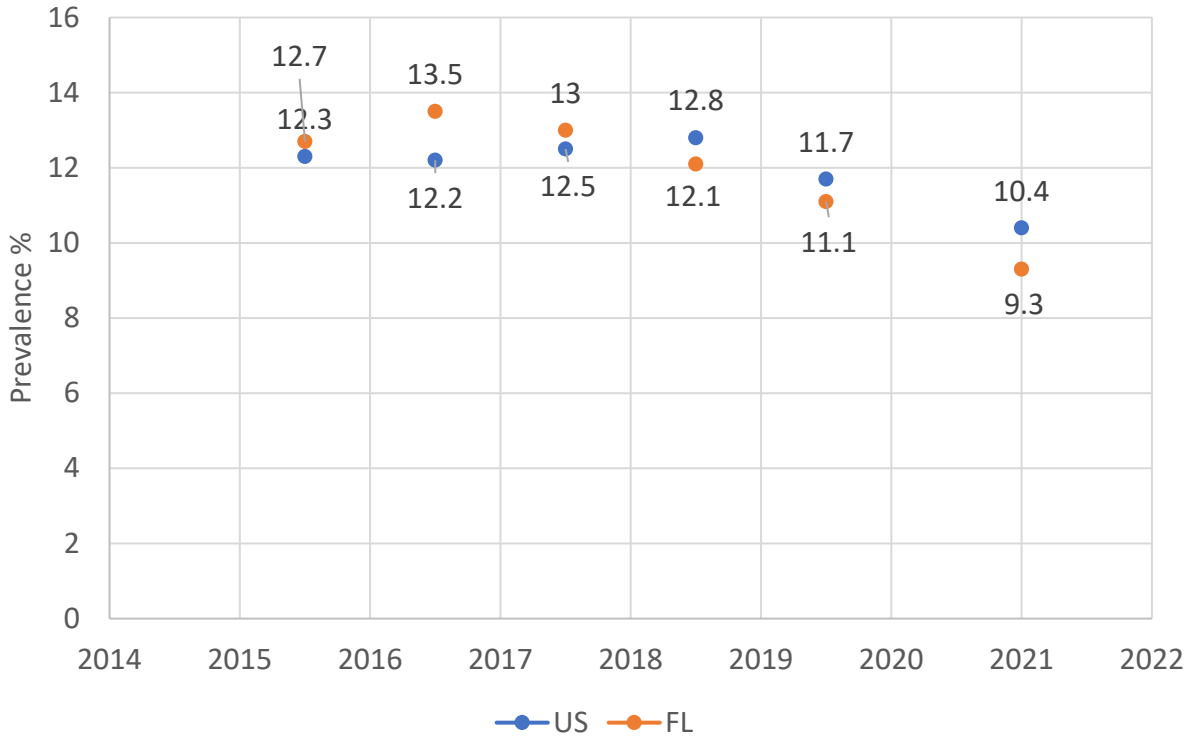


Figure 21. Two-Year Average Marijuana Use Among Youth, Past Year, United States and Florida, 2015–2021. Source: NSDUH.

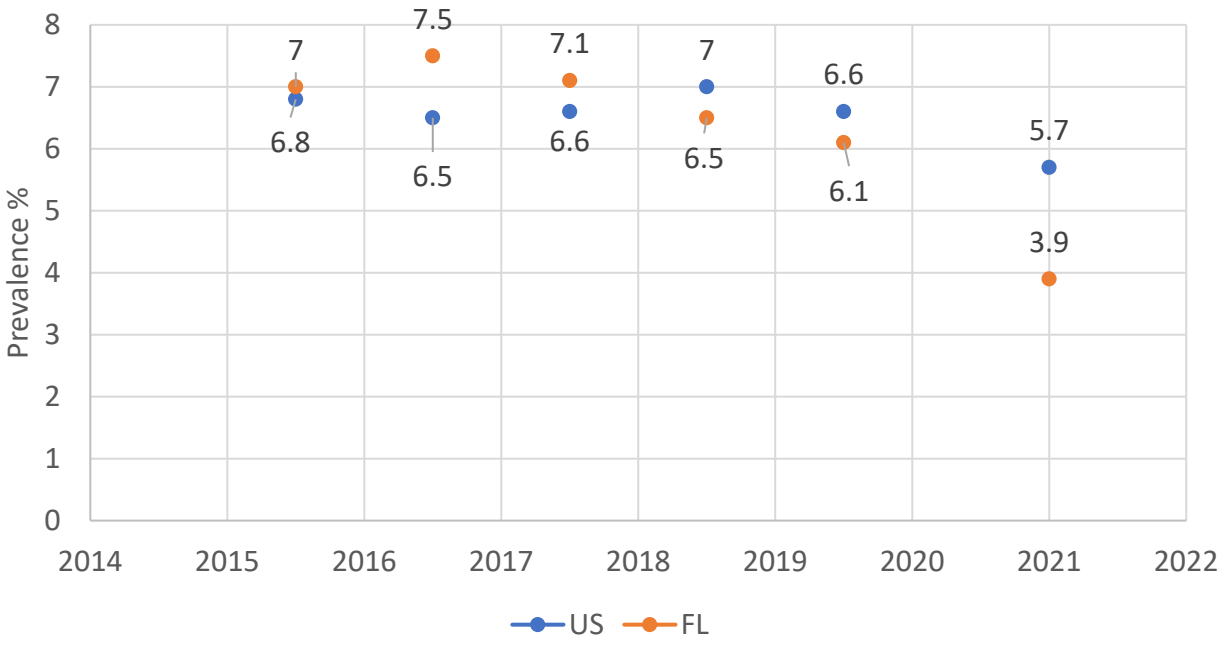


Figure 22. Two-Year Average Marijuana Use Among Youth, Past Month, United States and Florida, 2015–2020. Source: NSDUH.

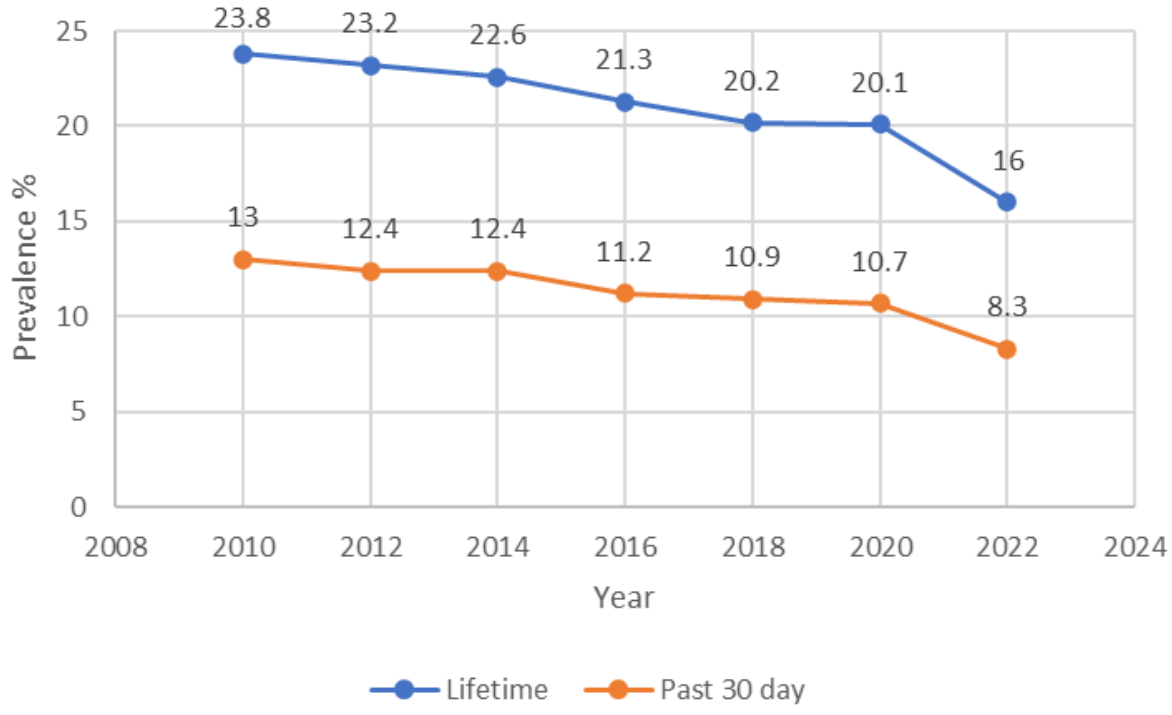


Figure 23. Marijuana Use Among Youth, Lifetime and Past Month, Florida, 2010–2022. Source: FYSAS.

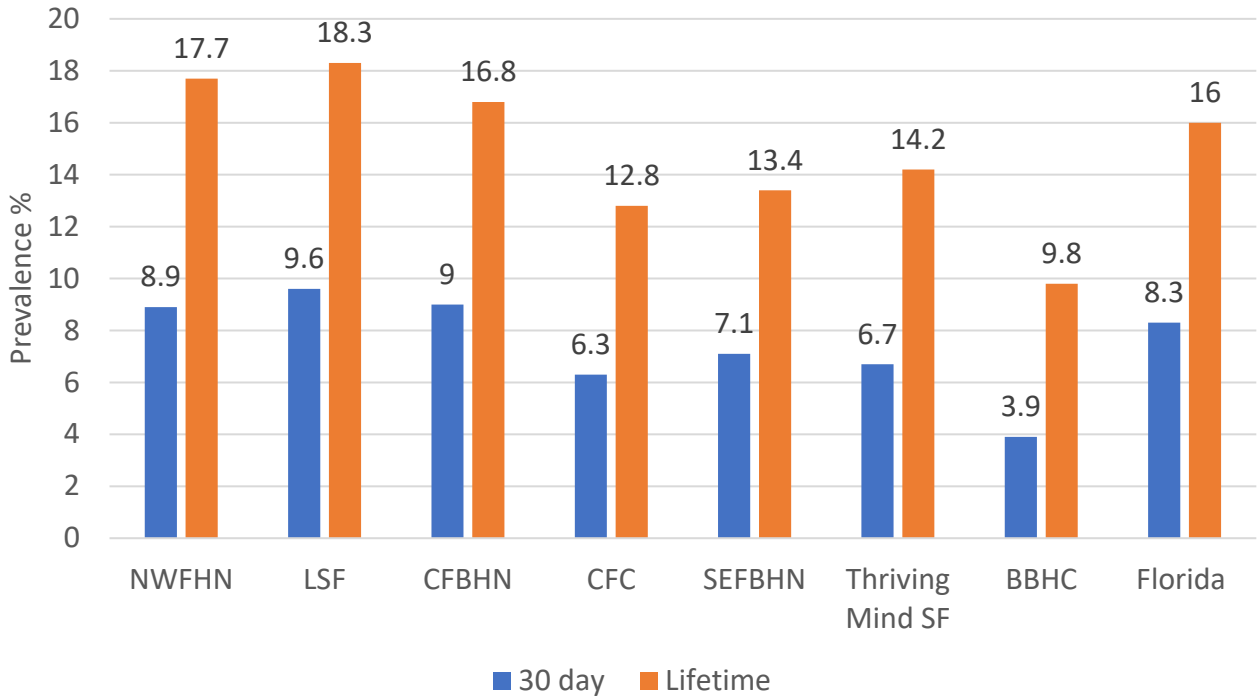


Figure 24. Marijuana Use Among Youth, Lifetime and Past Month by Managing Entities, 2022. Source: FYSAS.

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

According to the FYSAS, 12.5% of Florida youth reported using an electronic cigarette for nicotine in 2019 and 9.7% reported vaping nicotine in 2022 (Figure 25). Lifetime use dropped from 23.5% to 20.2% for ever using an electronic cigarette to vaping nicotine during the same period. The highest rates for lifetime and 30-day use were among youth in the Northwest Florida Health Network region while Broward Behavioral Health Network had the lowest rates (Figure 26). According to the 2022 Monitoring the Future survey vaping nicotine is among the top substances for youth. It was the number one used substance in the past 30-days by 8th grade and 10th grade students, while it was the second most used substance after alcohol for 12th grade students.

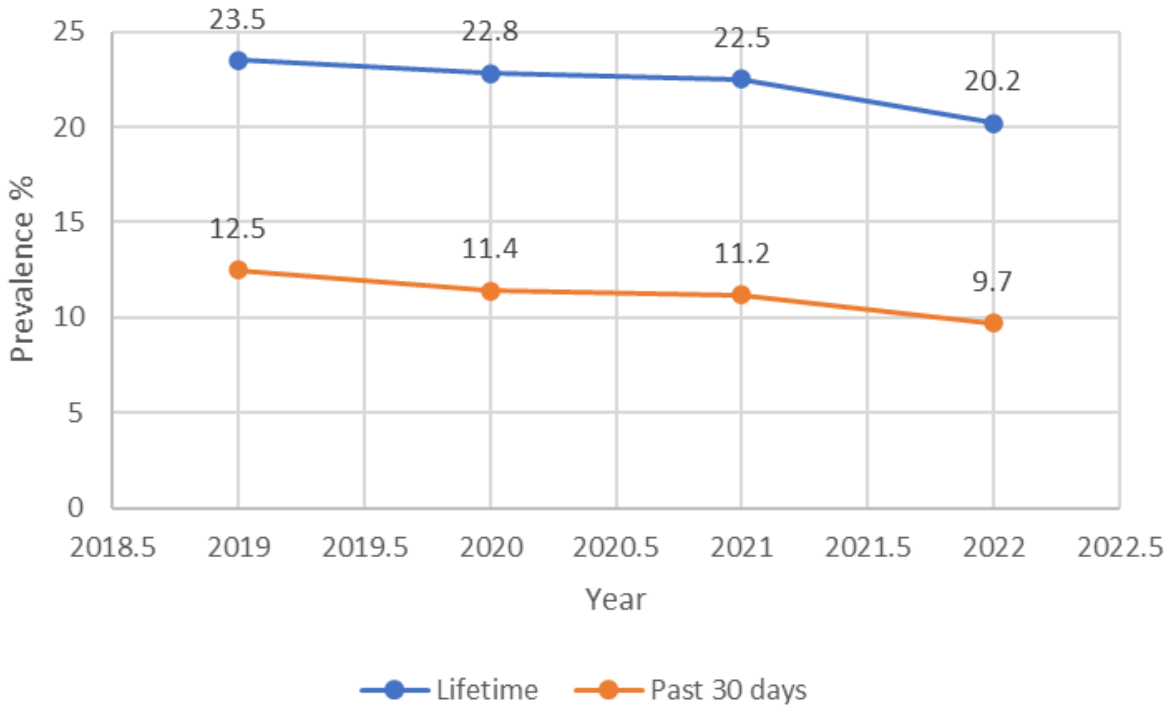


Figure 25. Vaping Nicotine Among Youth, Lifetime and Past Month, Florida, 2019-2022. Source: FYSAS.

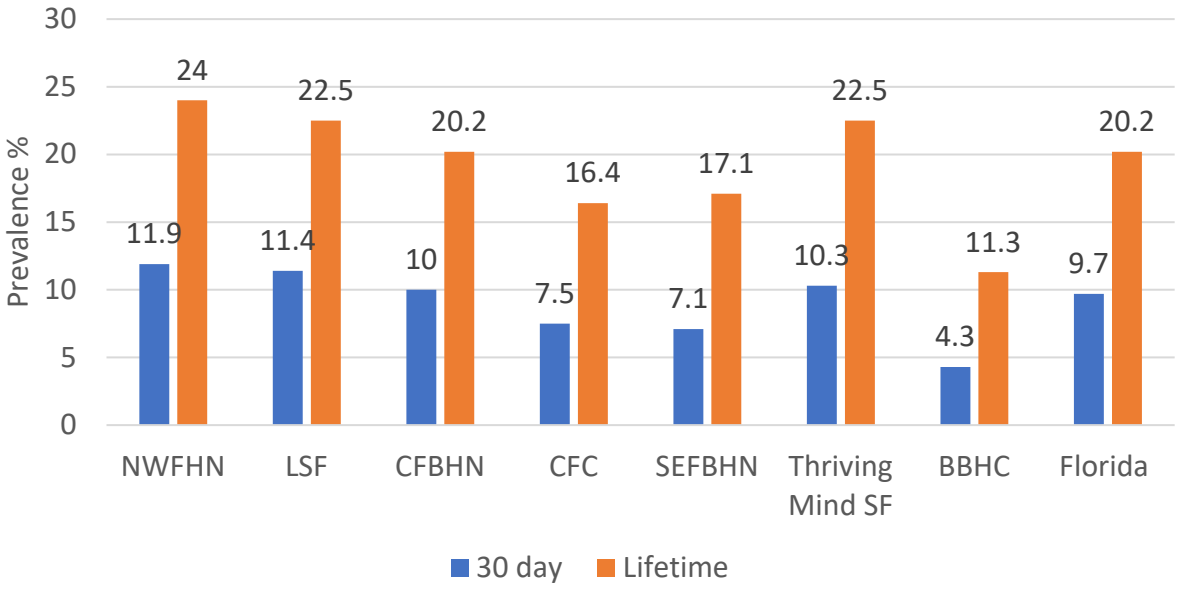


Figure 26. Vaping Nicotine Among Youth, Lifetime and Past Month, by Managing Entities, 2022. Source: FYSAS.

Vaping Marijuana Among Youth

Rates are lower for vaping marijuana in general compared to vaping nicotine with 6.8% of Florida youth vaping marijuana in the past-30 days and lifetime use of vaping marijuana at

13.2% (Figure 27). Rates are slowly decreasing since these questions were added to the survey. Among the Managing Entities, Central Florida Behavioral Health Network has the closest prevalence rates between lifetime and past 30-day use.

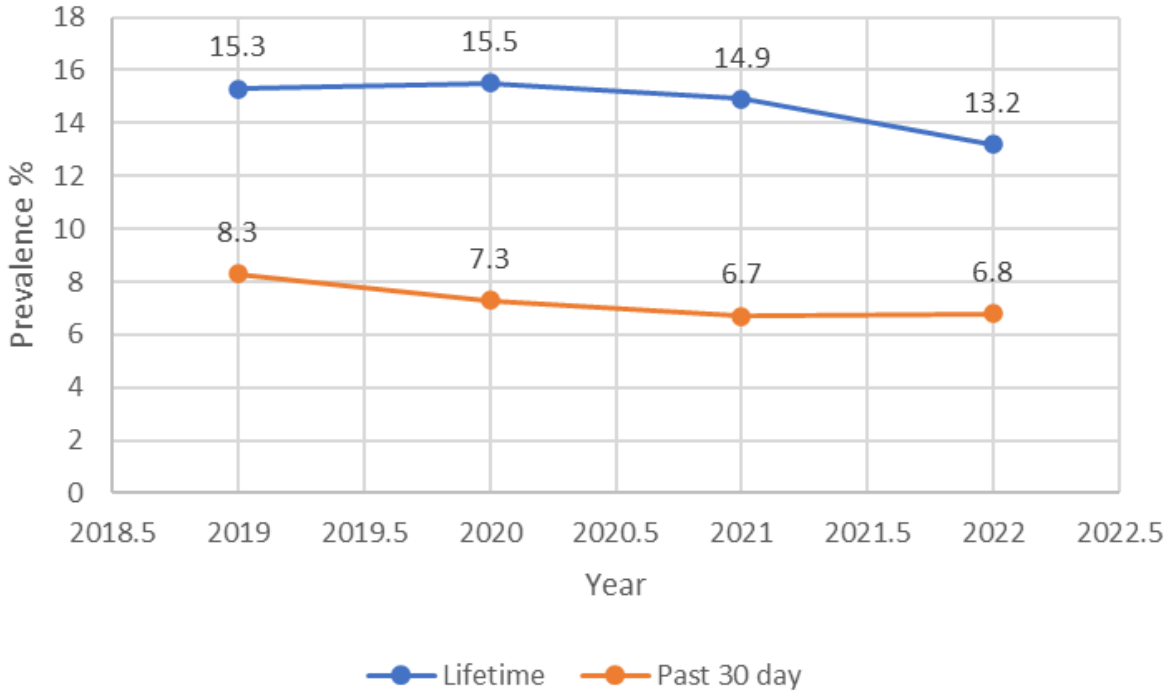


Figure 27. Vaping Marijuana Among Youth, Lifetime and Past Month, Florida, 2019-2022. Source: FYSAS.

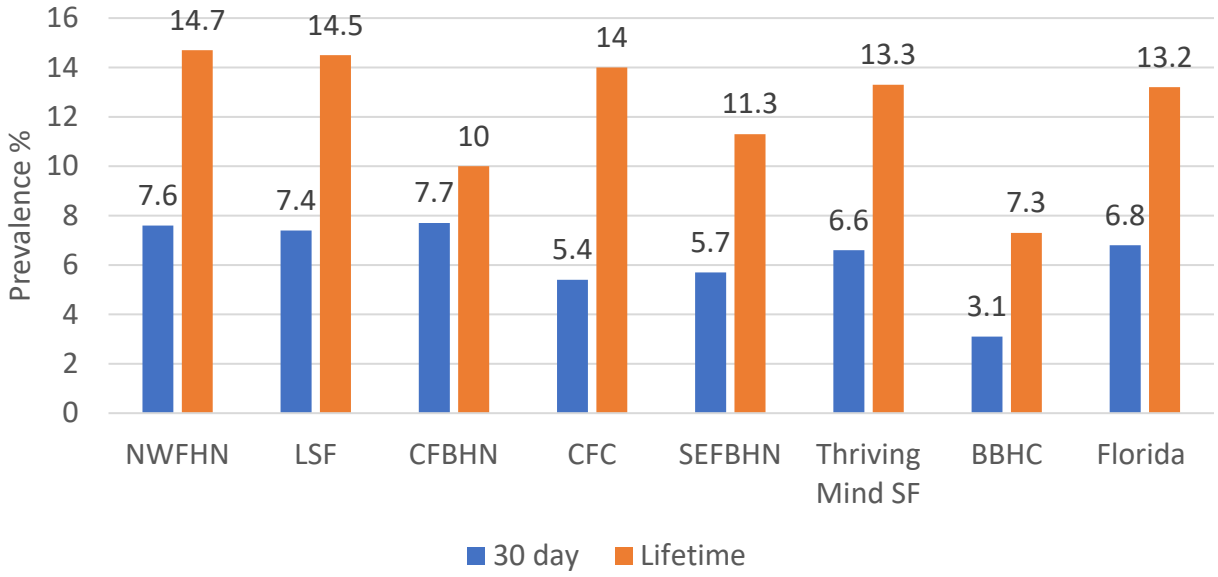


Figure 28. Vaping Marijuana Among Youth, Lifetime and Past Month, Among Managing Entities, 2022. Source: FYSAS.

Alcohol

Alcohol use is common in the United States. However, consuming too much alcohol can result in a range of negative health consequences. The 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. Despite an increase in past-month alcohol use since 2018-2019, recent data indicates another decrease to 53.2% of Florida adults endorsing past-month alcohol use in 2021 (Figure 29). A similar trend has been observed for binge drinking among adults. The lowest alcohol use rates for Florida adults occurred in 2018-2019 with a slight uptick in prevalence in 2019-2020. National rates for adult alcohol use and binge drinking continue to decrease (Figure 30).

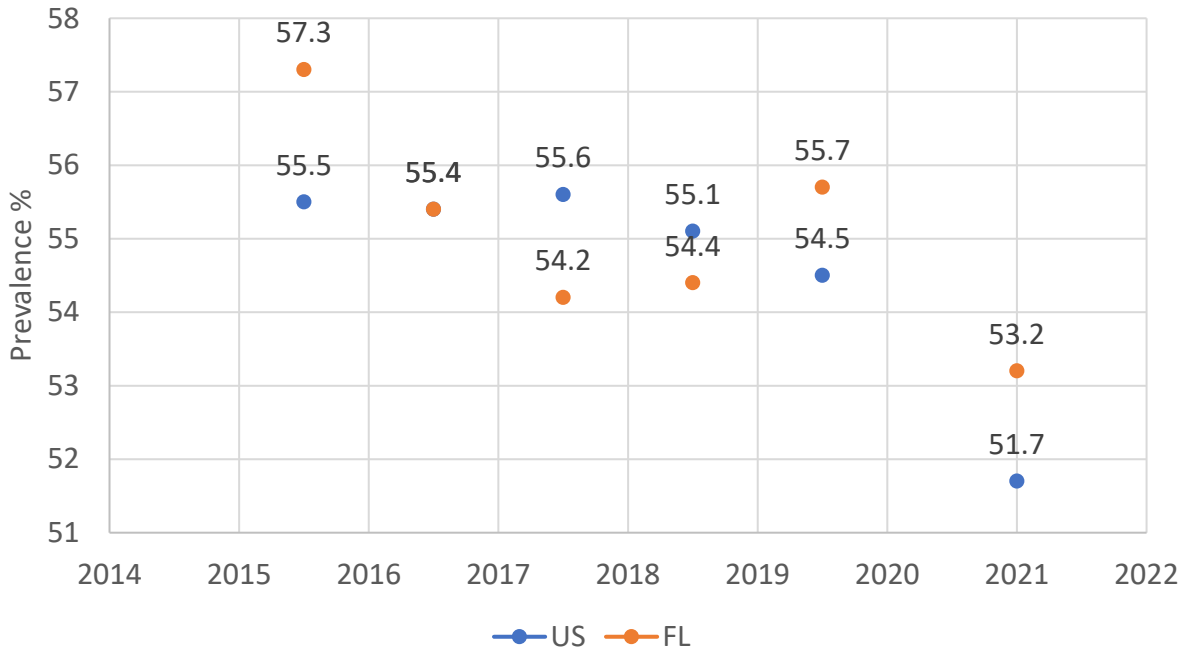


Figure 29. Two-Year Average Past Month Alcohol Use Among Adults, United States and Florida, 2015–2021. Source: NSDUH.

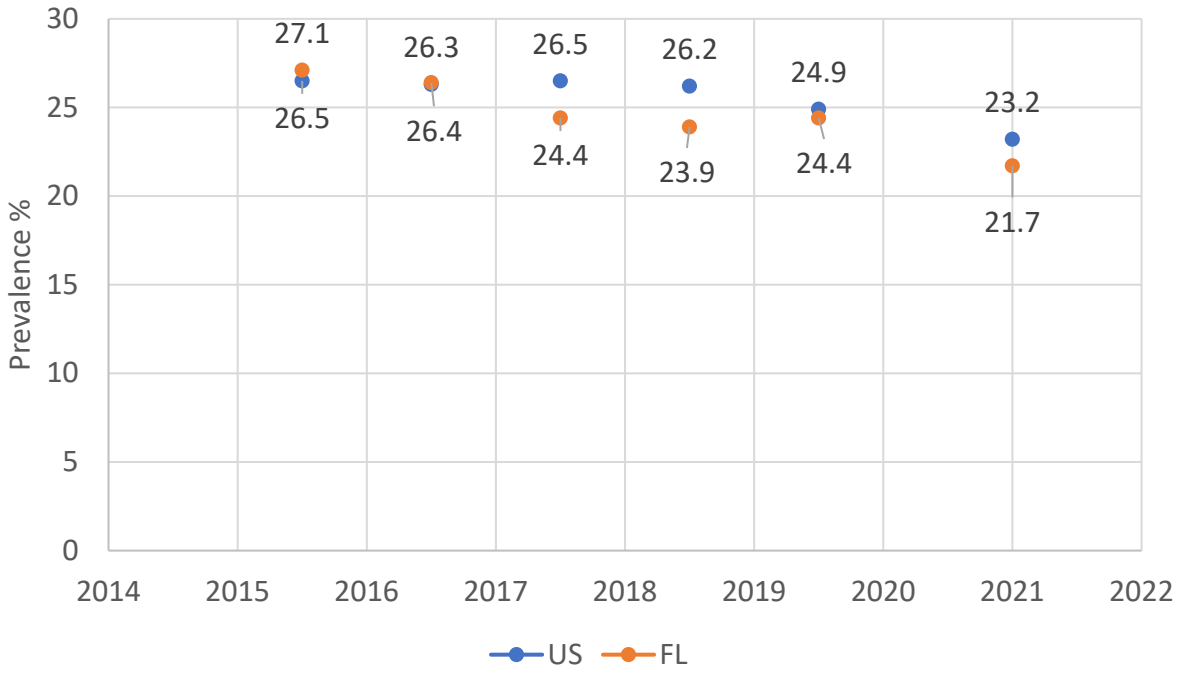


Figure 30. Two-Year Average Past Month Binge Alcohol Use Among Adults, United States and Florida, 2015–2021. Source: NSDUH.

Alcohol Use Among Youth

The highest rates of past-month alcohol use among youth in Florida occurred in 2017-2018. Rates then decreased in 2018-2019 with a slight upward trend for the 2019-2020 two-year average for Florida youth. In 2021, a dip in prevalence rates occurred for youth across the nation and in Florida, dropping down from 9.3% and 8.8% to 6.9% and 6.6% respectively (Figure 31). 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 34). Since 2010, lifetime and past-30-day use of alcohol continually decreased among Florida youth (Figure 32). The Thriving Mind South Florida and Lutheran Services of Florida regions had some of the highest reported lifetime and 30-day use of alcohol among the other Managing Entities (Figure 33).

Similar patterns occurred for binge drinking with declining prevalence rates among Florida youth since 2010. Rates between 2018 and 2021 remained steady around 6.7% but recently decreased from 2020-2022 to 5.6% (Figure 35). Binge drinking rates were highest among the Northwest Florida Health Network region and the lowest rates were among the Broward Behavioral Health Network region (Figure 36). The Monitoring the Future survey indicated that alcohol use remained stable for 8th and 10th graders but slightly increased for 12th graders.

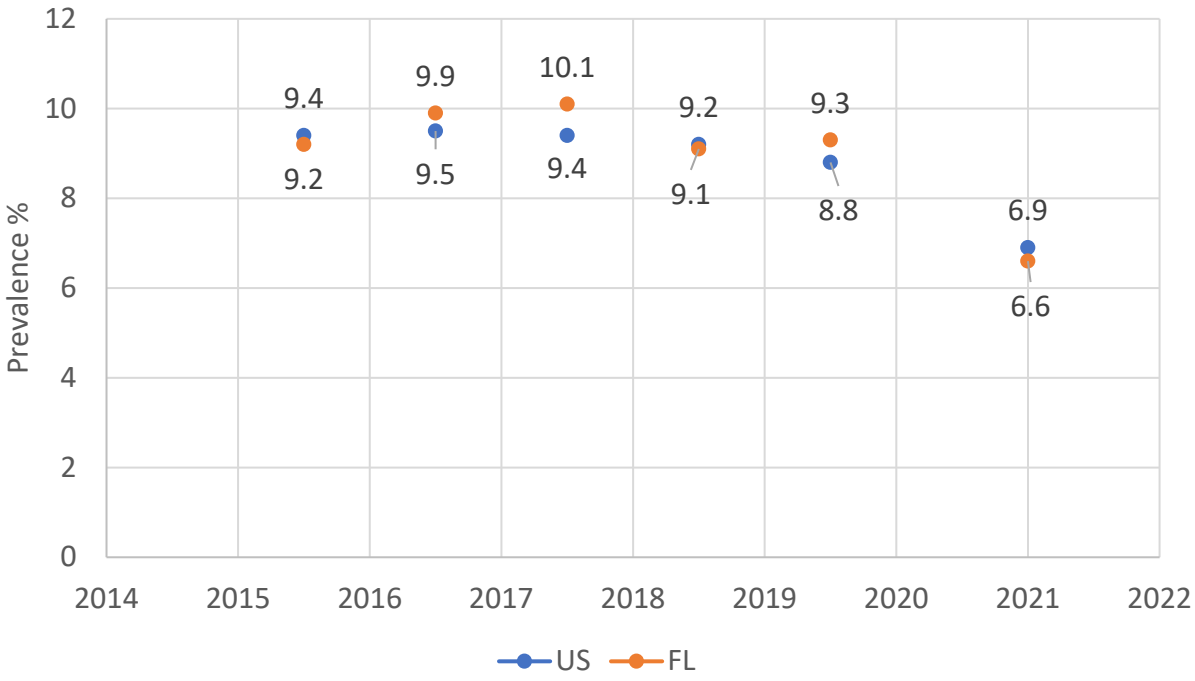


Figure 31. Alcohol Use Among Youth, Past Month, United States and Florida, 2015–2021. Source: NSDUH.

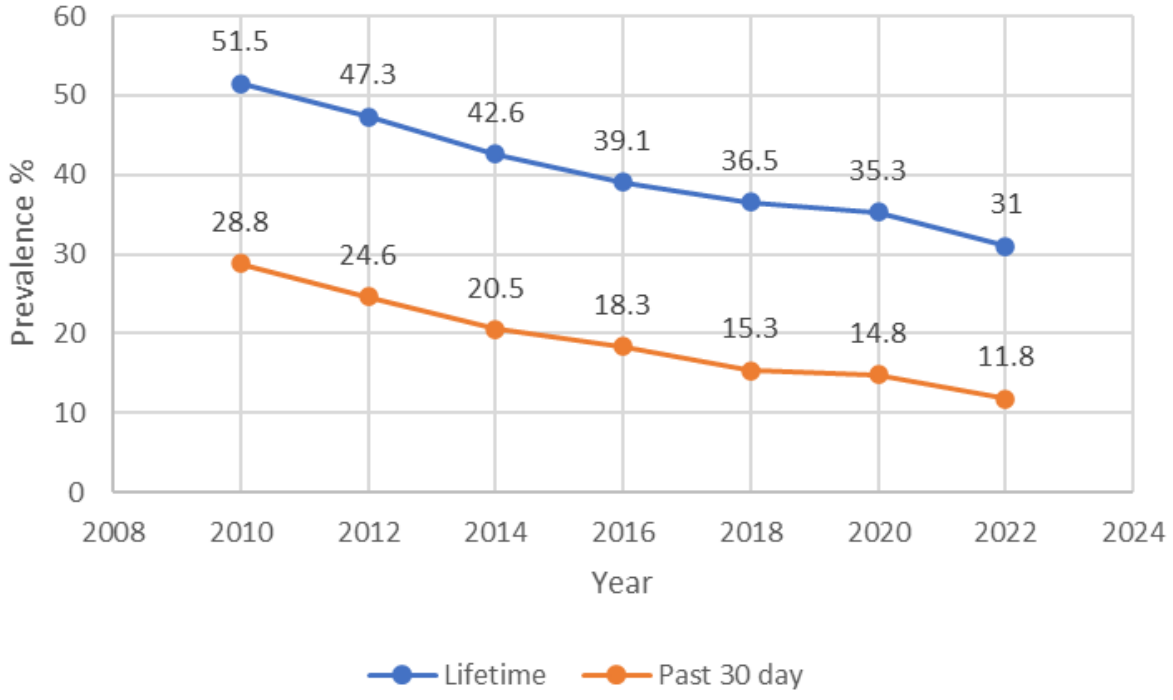


Figure 32. Alcohol Use Among Youth, Lifetime and Past Month, Florida, 2010–2022. Source: FYSAS.

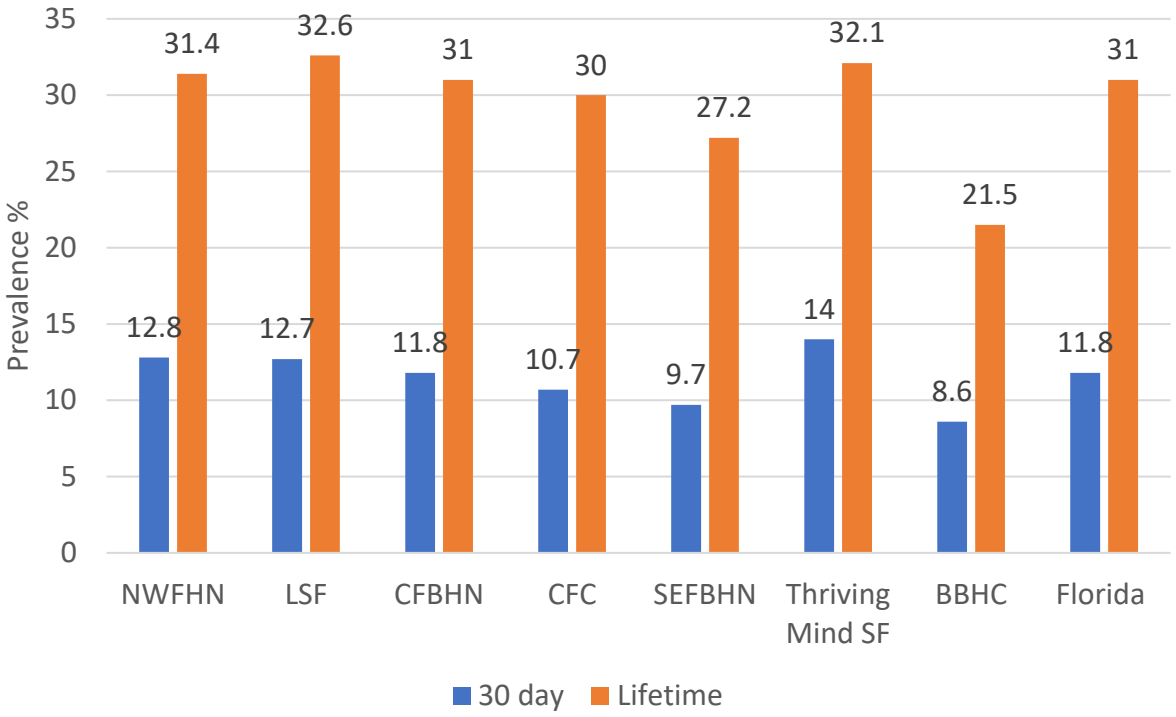


Figure 33. Alcohol Use Among Youth by Managing Entity in Florida, Lifetime and Past Month, 2022. Source: FYSAS.

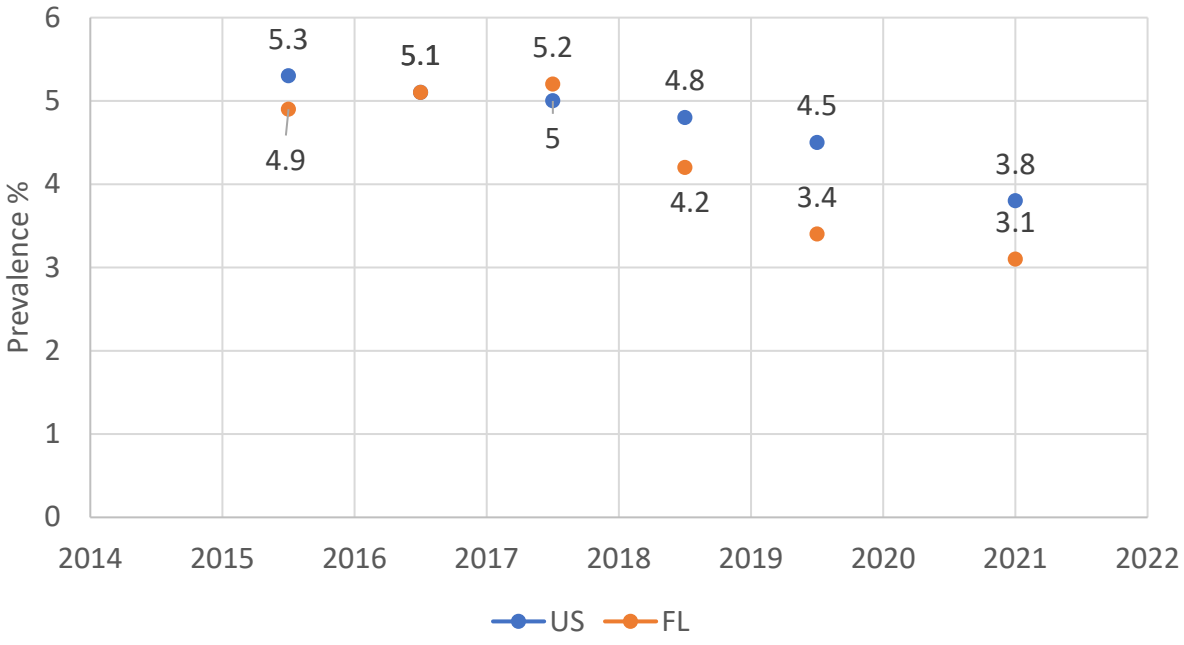


Figure 34. Binge Alcohol Use Among Youth, U.S. and Florida, 2015–2021. Source: NSDUH.

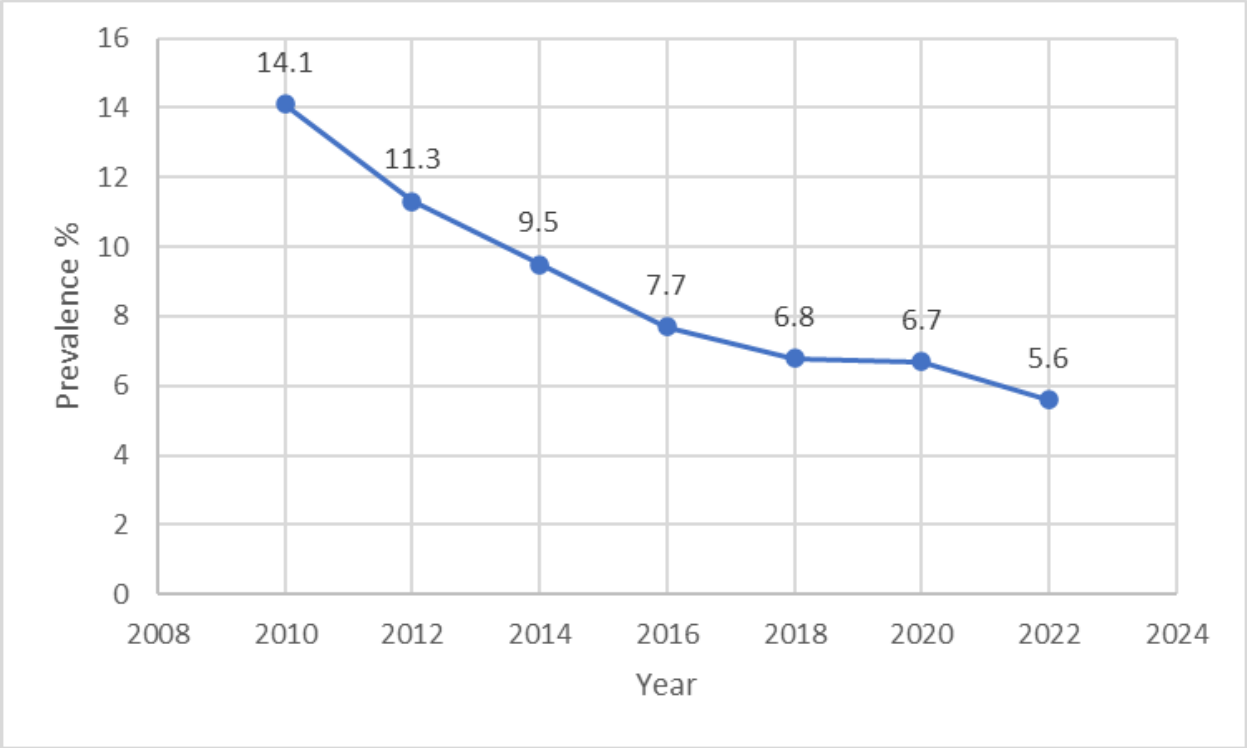


Figure 35. Binge Alcohol Use Among Youth, Florida, 2010–2022. Source: FYSAS.

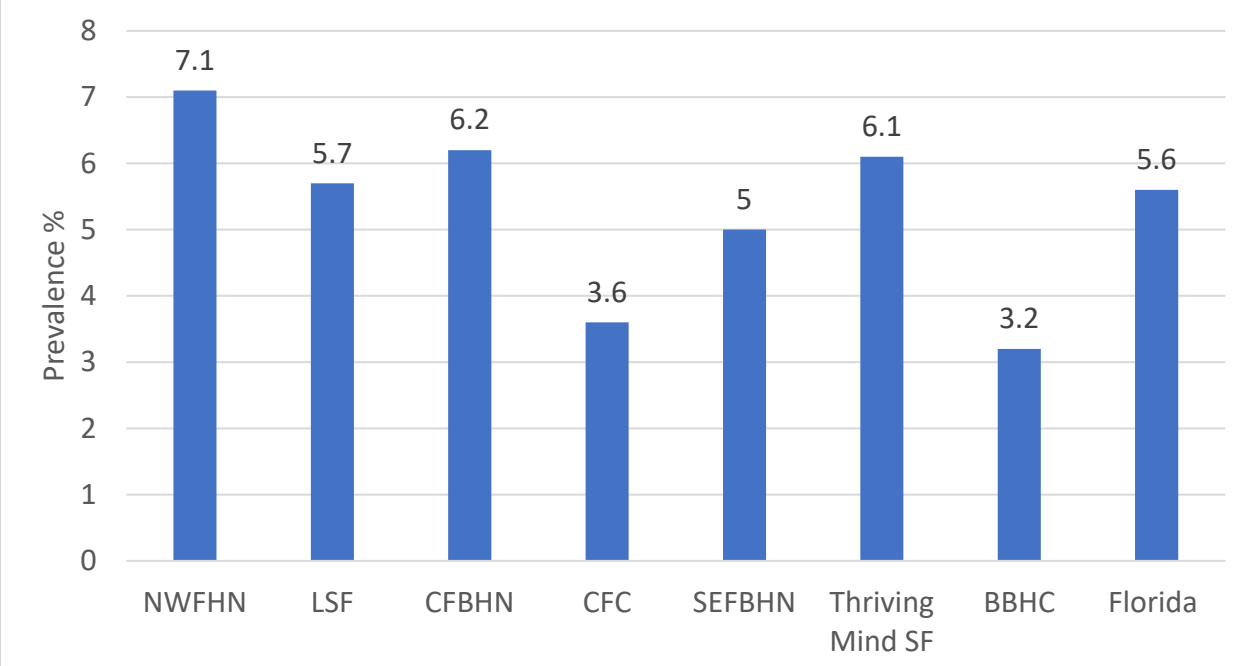


Figure 36. Binge Alcohol Use Among Youth, Florida Among Managing Entities, 2022. Source: FYSAS.

Inhalants

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 37). An upward trend has been observed for inhalant use from 2016- 2020 followed by a decrease in both lifetime and past 30-day use from 2020- 2022. The CFBHN and Lutheran Services Florida regions had the highest reported lifetime and 30-day inhalant use compared to other Managing Entities (Figure 38).

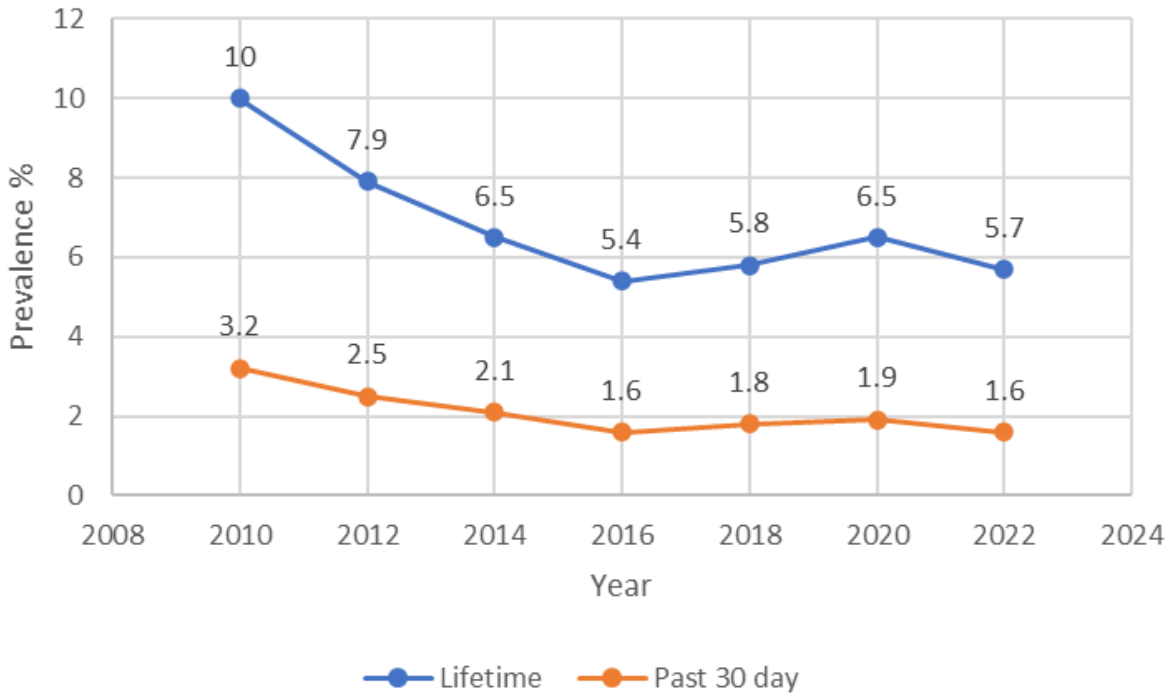


Figure 37. Lifetime and Past 30-day Use of Inhalants Among Youth in Florida, 2010–2022. Source: FYSAS.

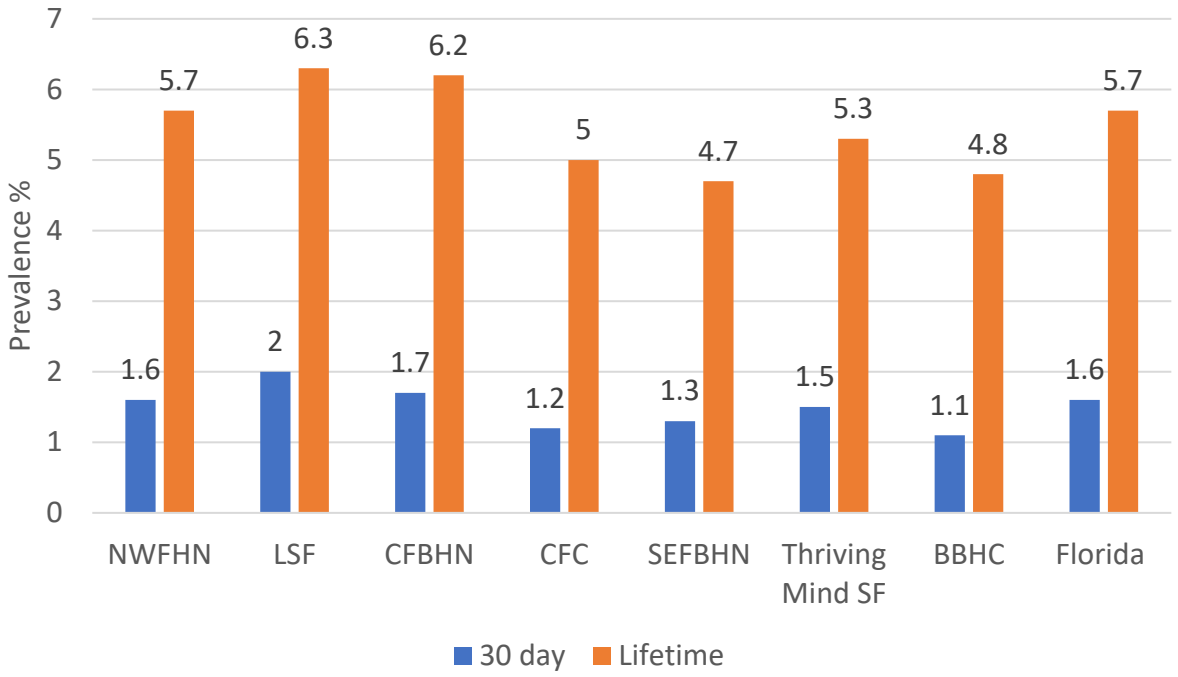


Figure 38. Lifetime and Past 30-day Use of Inhalants Among Youth in Florida Among Managing Entities, 2022. Source: FYSAS.

Club Drugs

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 39). However, a sudden increase in prevalence occurred for both past-month and lifetime use in 2019 and 2020 respectively. The 2022 FYSAS survey results show that club drug use among youth decreased in Florida. The Northwest Florida Health Network region had one of the highest reported rates for past 30-day club drug use and lifetime use (Figure 40).

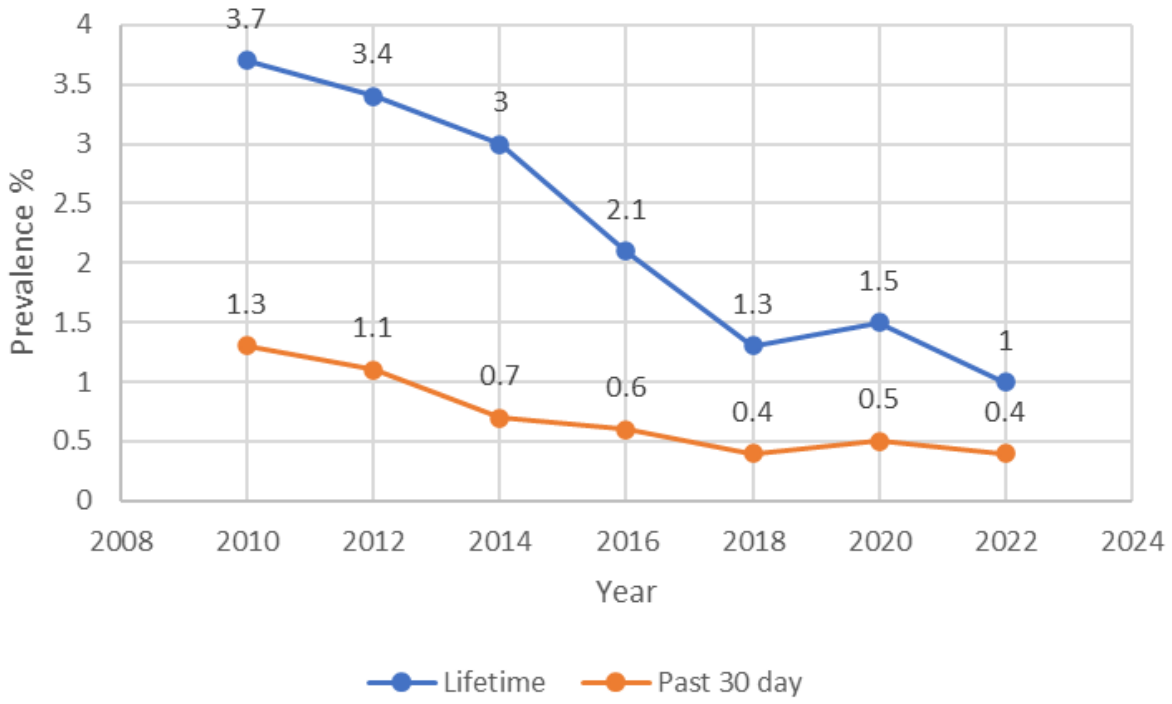


Figure 39. Lifetime and Past 30-day Club Drug Use Among Youth, Florida 2010–2022. Source: FYSAS.

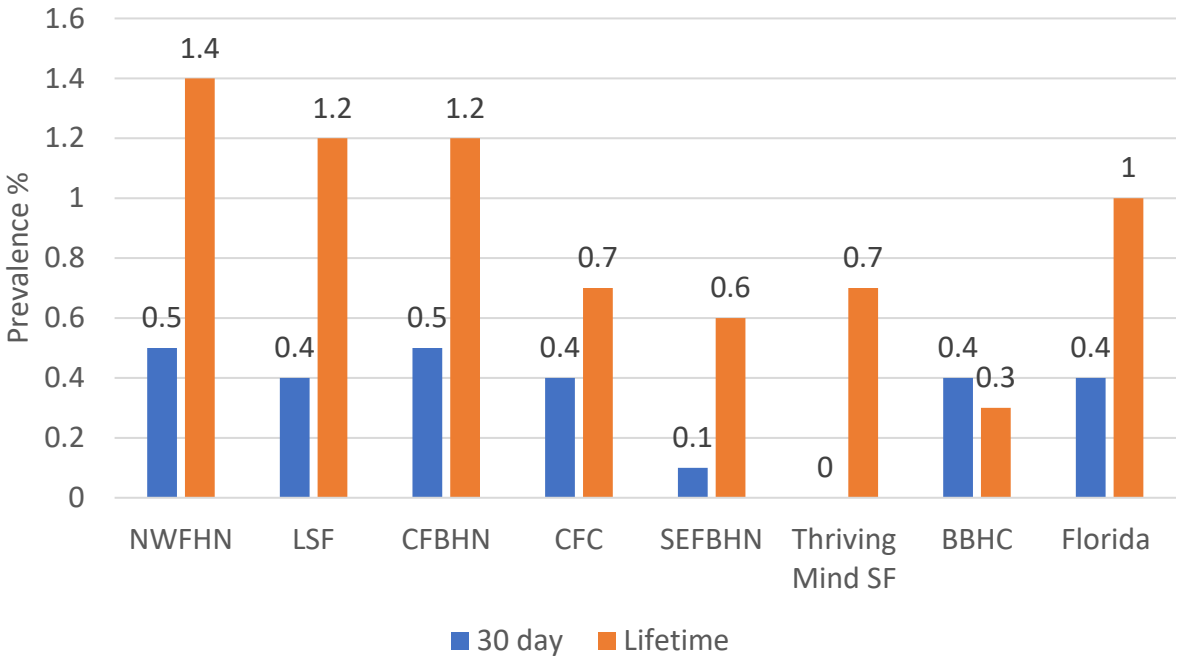


Figure 40. Lifetime and Past 30-day Club Drug Use Among Youth by Managing Entity, 2022. Source: FYSAS.

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

From 2015 to 2017 emergency department visits from non-fatal drug poisonings were increasing. In 2018, Florida experienced a decline in emergency department visits due to non-fatal drug poisonings - the only year for a decline (Figure 41). In 2019, the number of emergency room visits for non-fatal drug poisonings increased to over 40,000 and continued to increase through 2021 surpassing 50,000 visits (Figure 30). The first half of 2022 shows that 23,669 non-fatal drug emergency department visits were made. An estimated number of emergency department visits from non-fatal drug poisonings for 2022 could be just over 47,000, indicating a possible decrease in emergency visits from 2021. About half of the emergency department visits have been due to opioid-involved non-fatal overdoses (Figure 42). The number of non-fatal opioid overdose emergency department visits keeps climbing from 14,396 in 2018 to 23,540 visits in 2021 (Figure 42). The first half of 2022 shows that just over 10,000 emergency department visits for non-fatal opioid overdoses. To estimate the total number of visits for 2022, doubling the first half of 2022 would indicate just over 20,000 non-fatal opioid overdose visits. This would be a decrease from 2021 and 2020 as well.

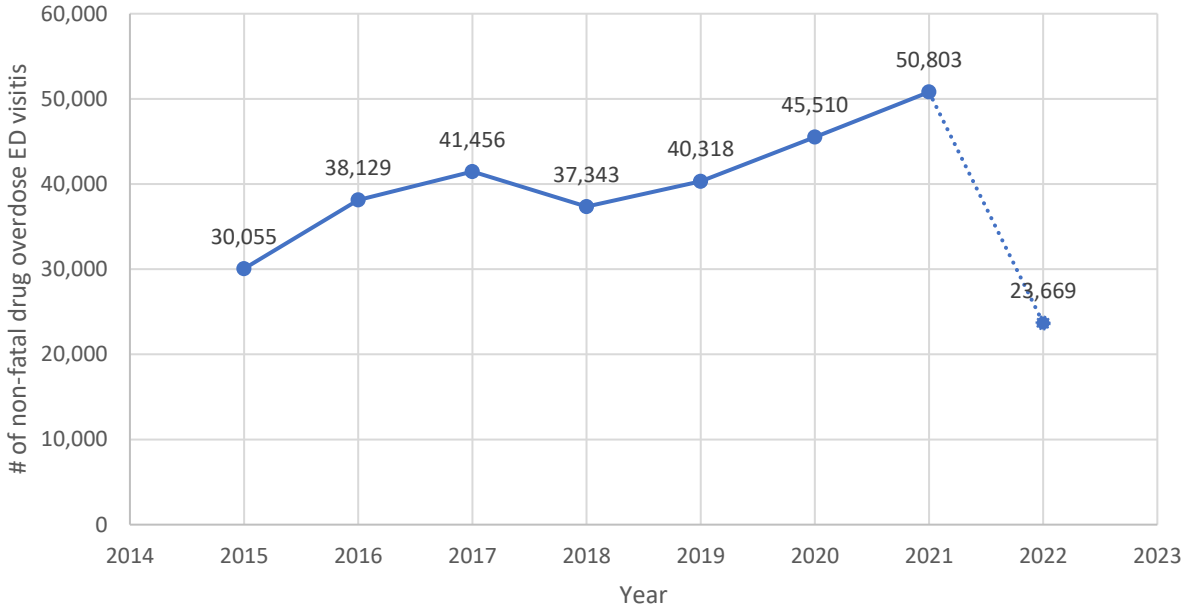


Figure 41. All Drug Non-Fatal Overdose Emergency Department Visits, Florida, 2015–2021. Source: FLHealthCharts.

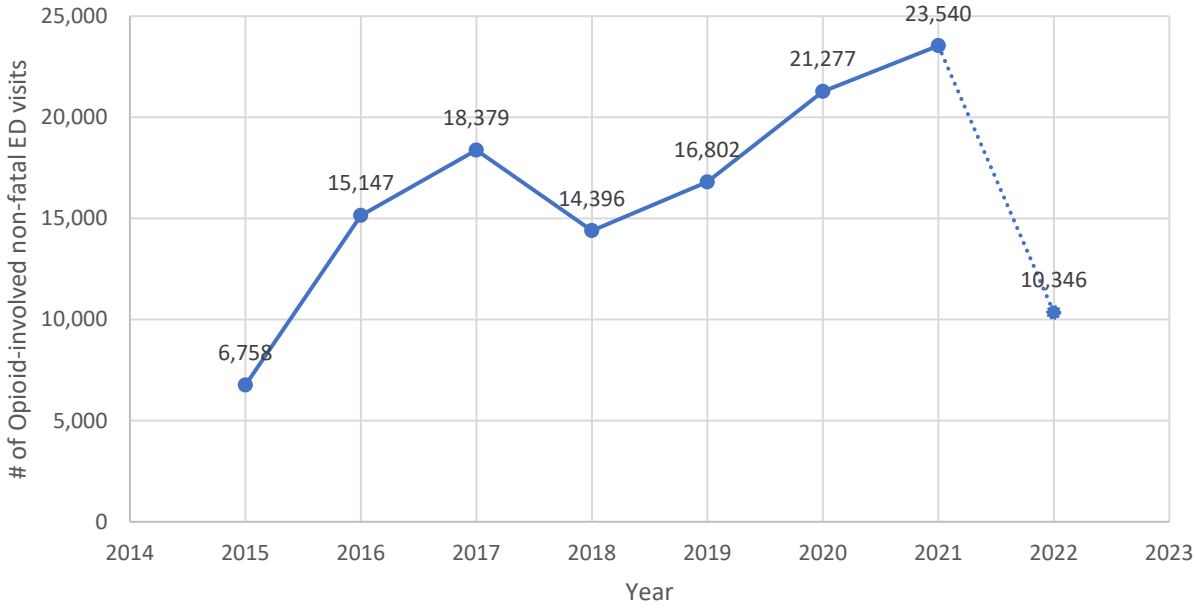


Figure 42. Opioid-involved Non-fatal Overdose Emergency Department Visits, Florida, 2015– First Half of 2022. Source: FLHealthCharts.

Mortality: Fatal Poisoning

Fatal drug overdose is the most severe consequence of substance use. In the U.S., drug overdose deaths increased 30% from 2019 to 2020. The Centers for Disease Control and Prevention indicates that overdose deaths increased by 14% from 2020 to 2021 with 106,699 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 continue to increase through 2021 with over 8,000 drug overdose deaths (Figure 43). Drug overdose death rates per 100,000 population shows that in 2015, the nation and Florida drug overdose death rates hovered around 16.0, but Florida's rate remained from 2016 to 2021, ending calendar year 2021 with a death rate at 37.5 and the U.S. at 32.4 (Figure 44).

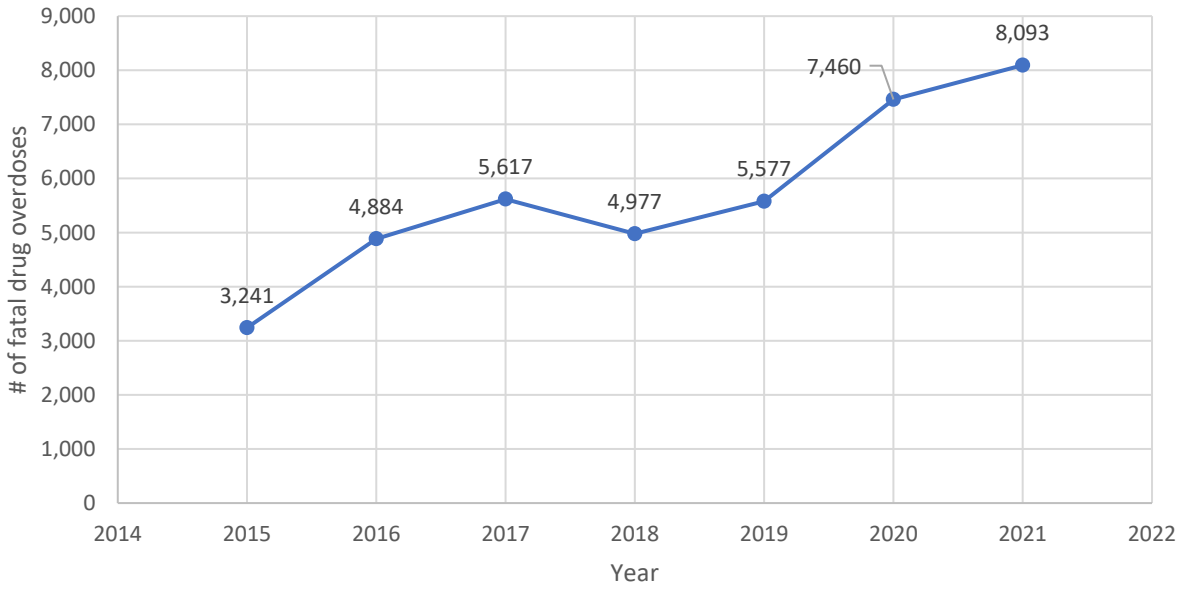


Figure 43. Fatal Drug Overdose Deaths in Florida. 2015–2021. Source: FLHealthCharts.

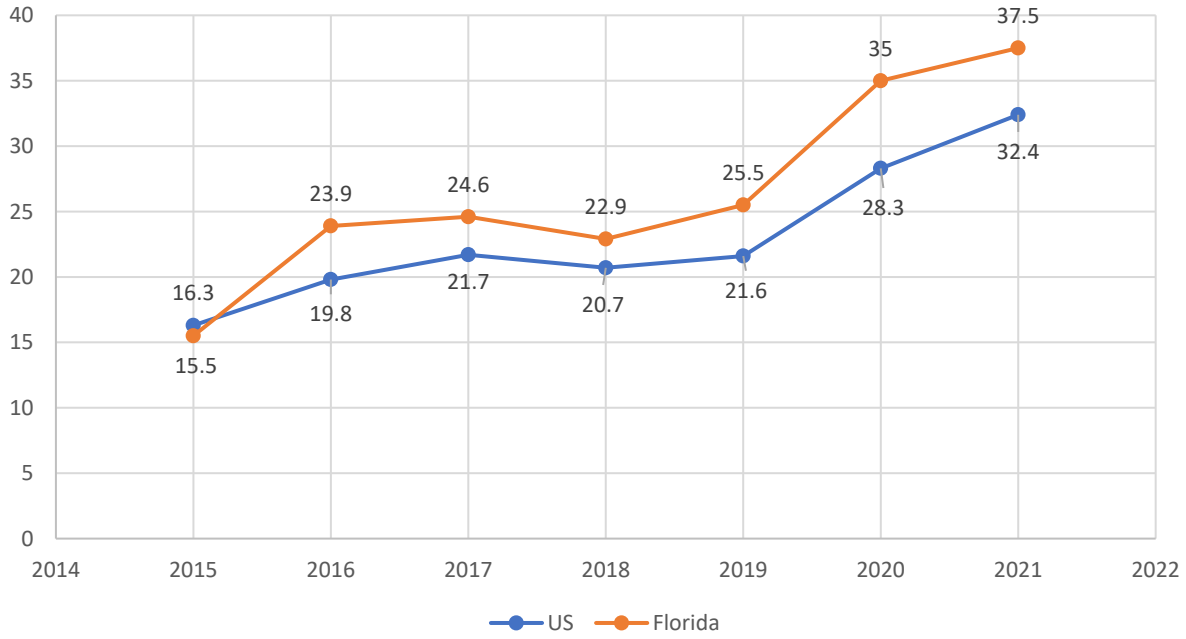


Figure 44. Fatal Drug Overdose Death Rate in the US and Florida. 2015–2021. Source: CDC

Role of 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. In Florida, the increasing number of fatal opioid overdose deaths mirror all drug overdose death trends. Fatal opioid overdose deaths reached 6,442 in 2021 (Figure 45) which is a slight increase from 6,089 in 2020.

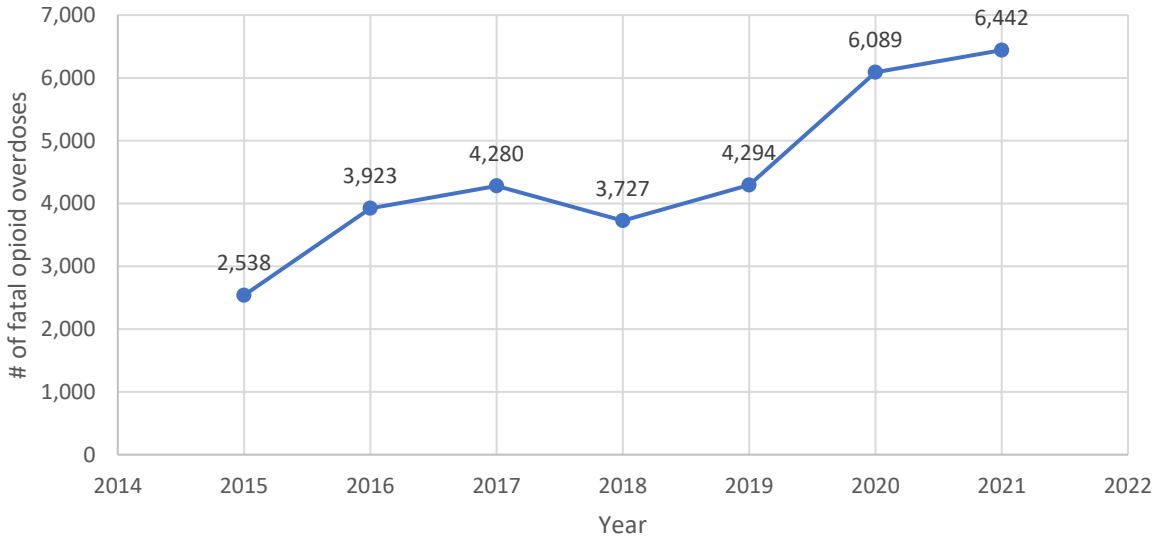


Figure 45. Fatal Opioid Overdose Deaths in Florida. 2015–2021. Source: FLHealthCharts.

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 these Medical Examiners reports, a comparison of the number of occurrences among the Managing Entities is shown below for 2021 (Figure 46). Based on rate per 100,000 population, prescription opioid related deaths showed similar rates across the state. The lowest rate, 3.8, was in the Thriving Mind South Florida region. The highest rate was 11.9 in the Northwest Florida Health Network region.

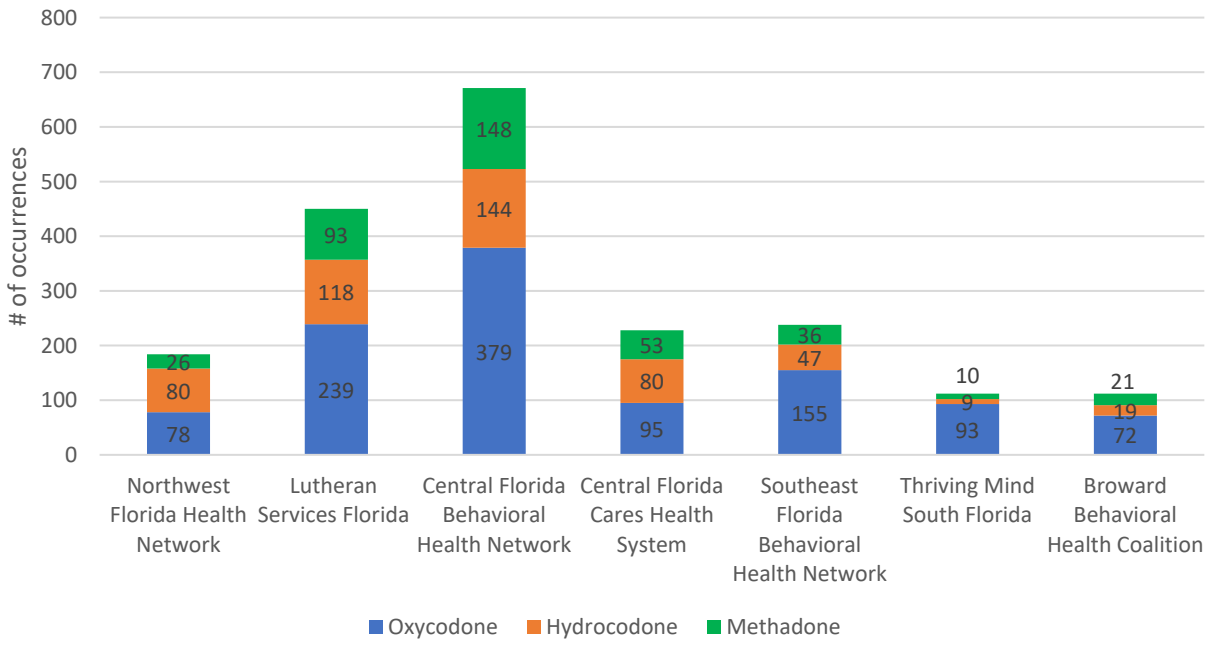


Figure 46. Oxycodone, Hydrocodone, and Methadone Occurrences among Decedents in Florida for Managing Entities, 2021. Source: FDLE.

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 those rates remained stable in 2019. A slight decrease in the number of heroin-related deaths was observed for 2020 and then a dramatic decrease appeared in the number of occurrences in 2021 with 464 heroin-related deaths in Florida (Figure 47). The number of occurrences for heroin-related deaths that were the cause and present at the time of death are distributed by Managing Entity for 2021 in Figure 48. Central Florida Behavioral Health Network had the highest total number of occurrences for heroin-related deaths, while Thriving Mind South Florida had the lowest with 22 heroin-related deaths. However, based on rate per 100,000 population, the Broward Behavioral Health Coalition region and Northwest Florida Health Network region both had a rate of 3.7 - the highest rate of heroin-related deaths among the Managing Entities within Florida. The lowest rate for heroin-related deaths was in the Thriving Mind South Florida region with 0.7 rate per 100,000 population.

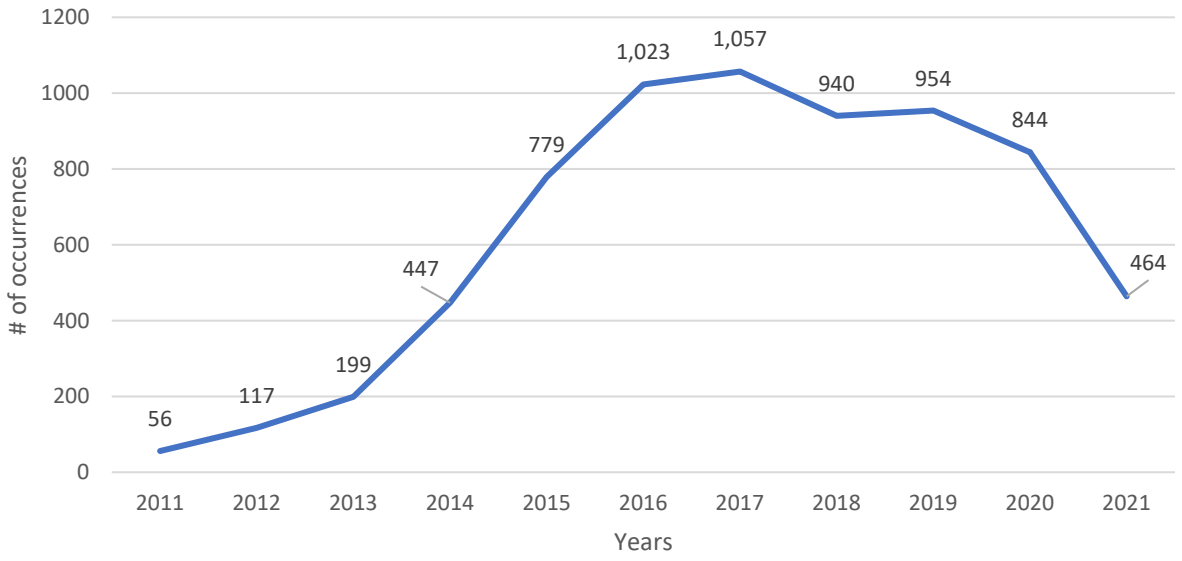


Figure 47. Heroin-related deaths among decedents in Florida, 2011- 2021. Source: FDLE.

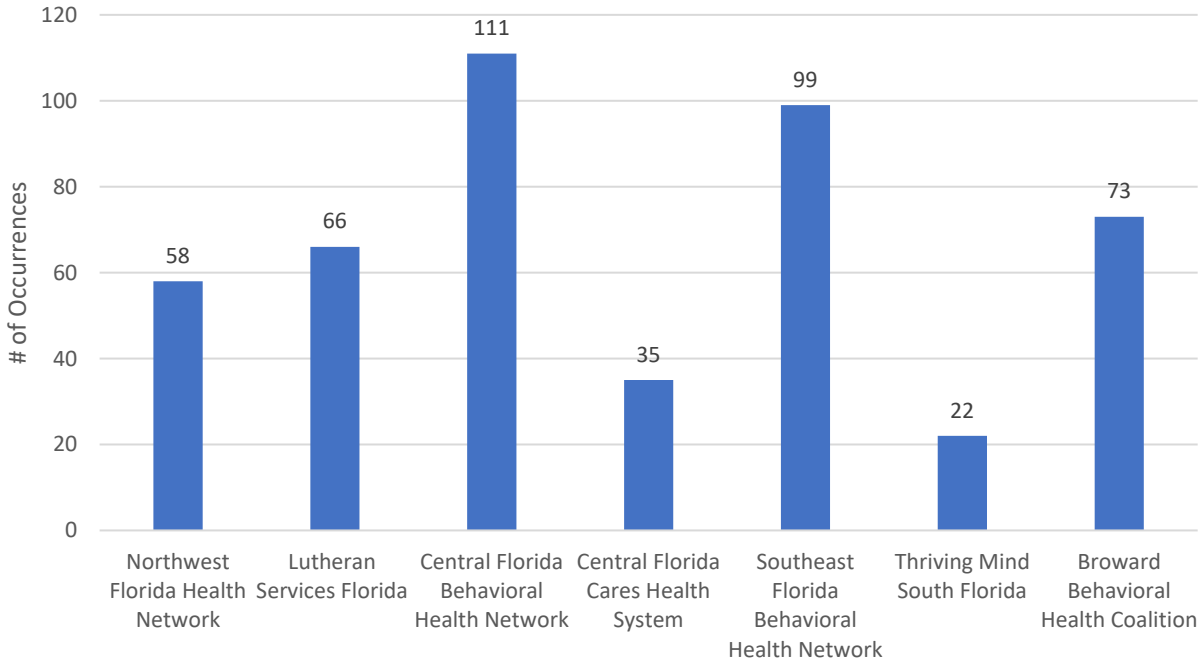


Figure 48. Heroin-related Deaths Among Decedents for Managing Entities, 2021 Source: FDLE.

Increases in deaths due to synthetic opioids (mostly synthetic fentanyl) began the third wave of the opioid epidemic. Fentanyl and fentanyl analogue-related deaths increased dramatically starting in 2015 (Figure 49). The sharpest increase for fentanyl and fentanyl analogue-related deaths in Florida occurred from 2019 to 2020, with 7,785 fentanyl and fentanyl analogue-related deaths. For 2021, there were 9,218 fentanyl and fentanyl analogue-related deaths in Florida. Fentanyl and fentanyl analogue-related deaths are shown among the Managing Entities in Figure 50. The occurrences of both fentanyl and fentanyl analogue-related deaths were highest in Central Florida Behavioral Health Network with 2,592 occurrences and the lowest total number of occurrences appearing in the Thriving Mind South Florida region. Based on rate per 100,000 population, the Broward Behavioral Health Coalition region has the highest rate per fentanyl and fentanyl analogue-related deaths in Florida with a death rate of 56.8. The lowest fentanyl death rate was 19.4 in the Thriving Mind South Florida region.

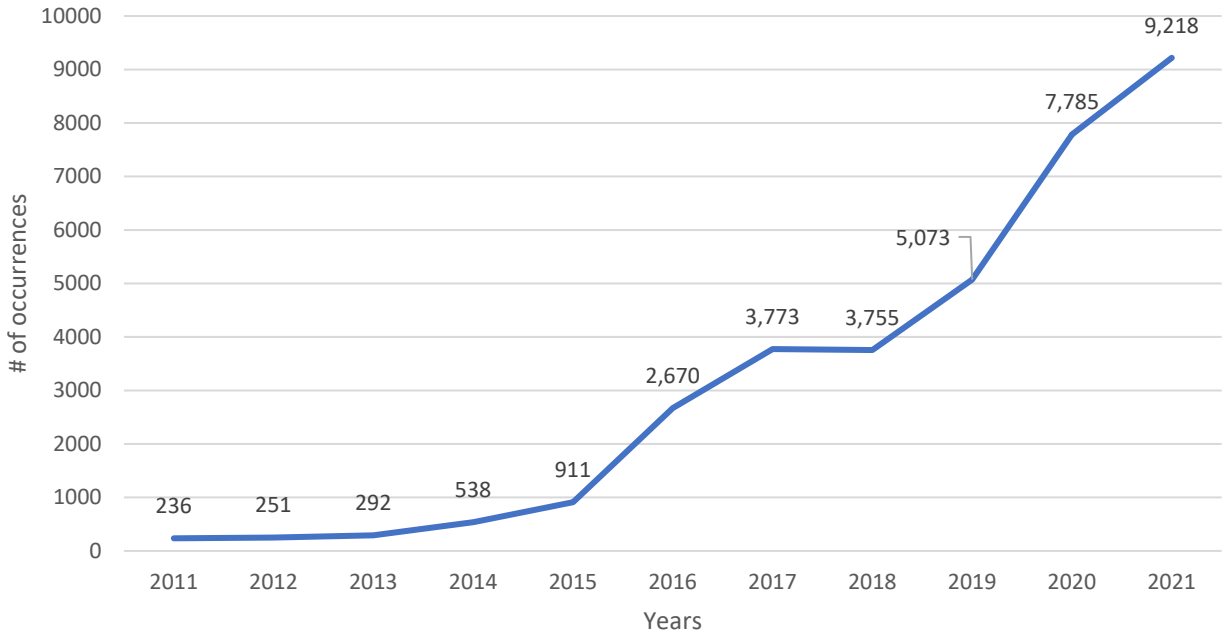


Figure 49. Fentanyl and Fentanyl Analogue-related Deaths Among Decedents in Florida, 2011- 2021. Source: FDLE.

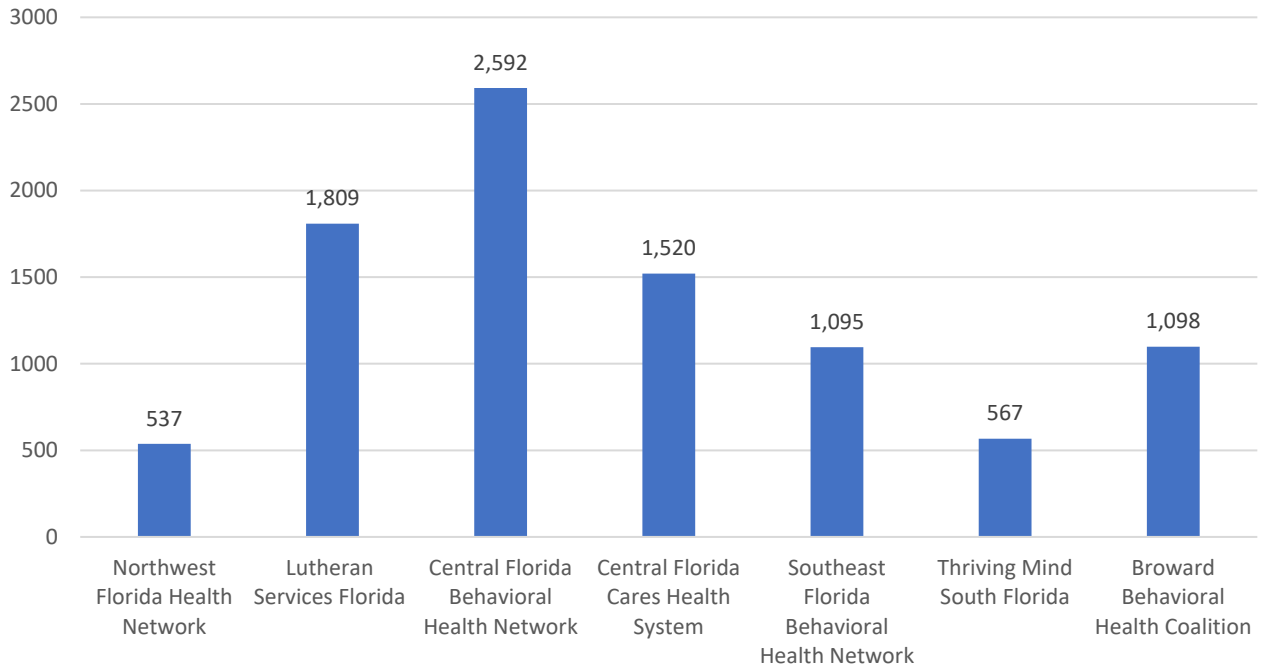


Figure 50. Fentanyl and Fentanyl Analogue-related Deaths Among Decedents for Managing Entities, 2021. Source: FDLE.

Role of Stimulants

Fatal drug poisonings due to stimulants are also increasing. Florida is experiencing a nearly parallel rise with the U.S., for both cocaine and psychostimulants (methamphetamine) death rates. Rates of cocaine-caused deaths in Florida have been consistently higher than in the U.S., 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 then sharply increased in 2020. In addition, another increase in cocaine deaths occurred in 2021 with 4,015 cocaine-related deaths in Florida (Figure 51). The total number of occurrences from cocaine-related deaths are also distributed by Managing Entity region in Figure 52. The highest total number of cocaine-related occurrences that caused and were present at the time of death occurred in the Central Florida Behavioral Health Network region with 1,073 occurrences. The lowest number of occurrences was reported in the Northwest Florida Health Network with 168 occurrences. Based on rate per 100,000 population, the highest cocaine-related death rate in Florida was in the Broward Behavioral Health Coalition region with 25.1. The lowest cocaine-related death rate was in the Northwest Florida Health Network region with 10.9 rate per 100,000 population.

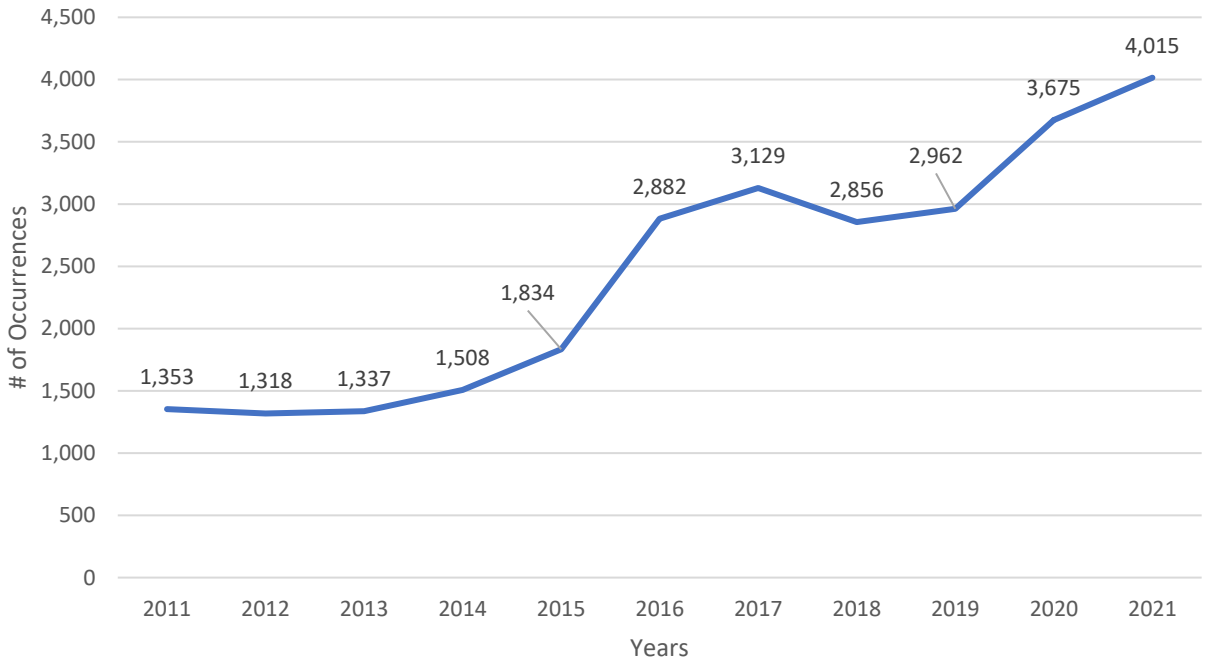


Figure 51. Cocaine-related Deaths Among Decedents in Florida, 2011- 2021. Source: FDLE.

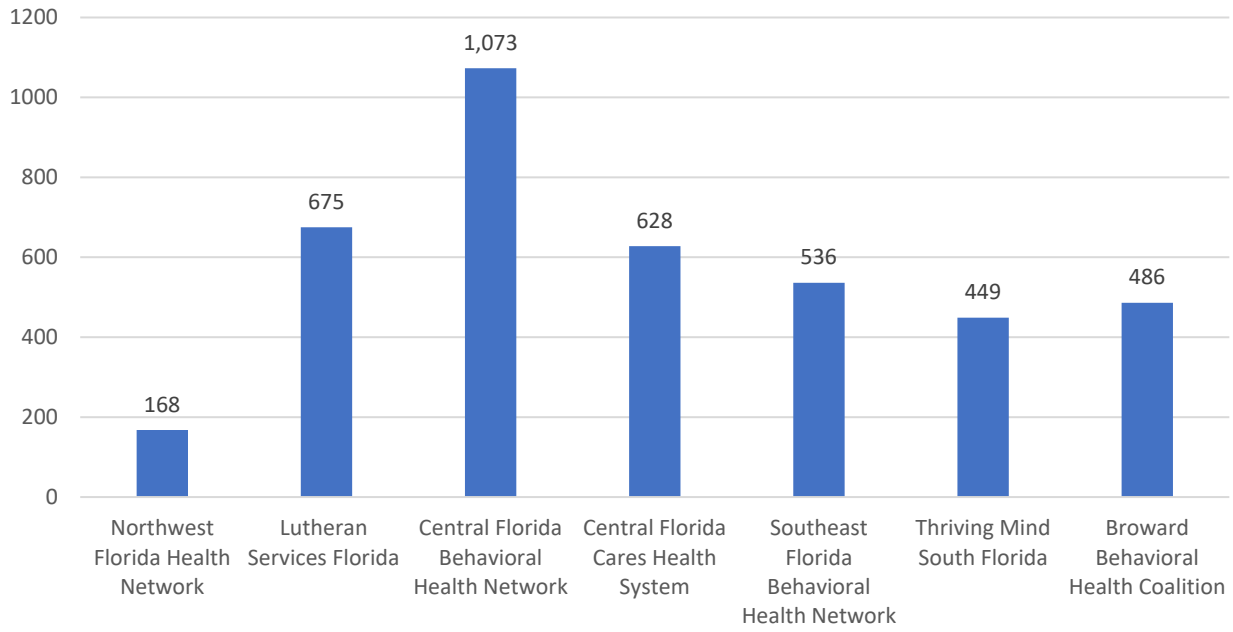


Figure 52. Cocaine-related Deaths Among Decedents for Managing Entities, 2021. Source: FDLE.

Deaths from psychostimulants, like methamphetamine, have also increased 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 2021 (Figure 53). In 2021, there were 2,934 methamphetamine-related deaths in Florida. The number of methamphetamine-related deaths is distributed among the Managing Entity regions in Figure 54. There were 1,073 occurrences of methamphetamine-related deaths in the Central Florida Behavioral Health Network region. The lowest number of occurrences were in the Broward Behavioral Health Coalition region with just 79 occurrences at the time of death. Based on rate per 100,000 population, the highest rate for methamphetamine-related deaths among the Managing Entities was in the Northwest Florida Health Network region with 27.2 rate per 100,000. The region managed by Thriving Mind South Florida had the lowest methamphetamine-related death rate with 2.7 per 100,000 population.

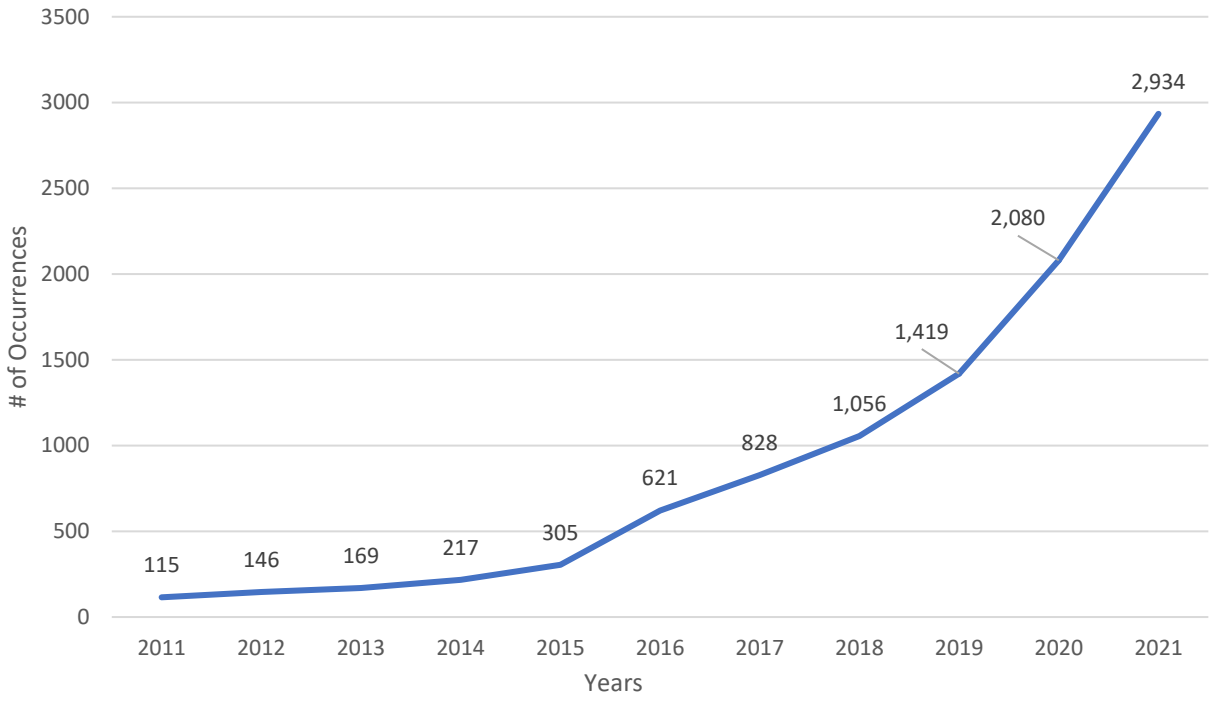


Figure 53. Methamphetamine-related Deaths Among Decedents in Florida, 2011- 2021.
Source: FDLE.

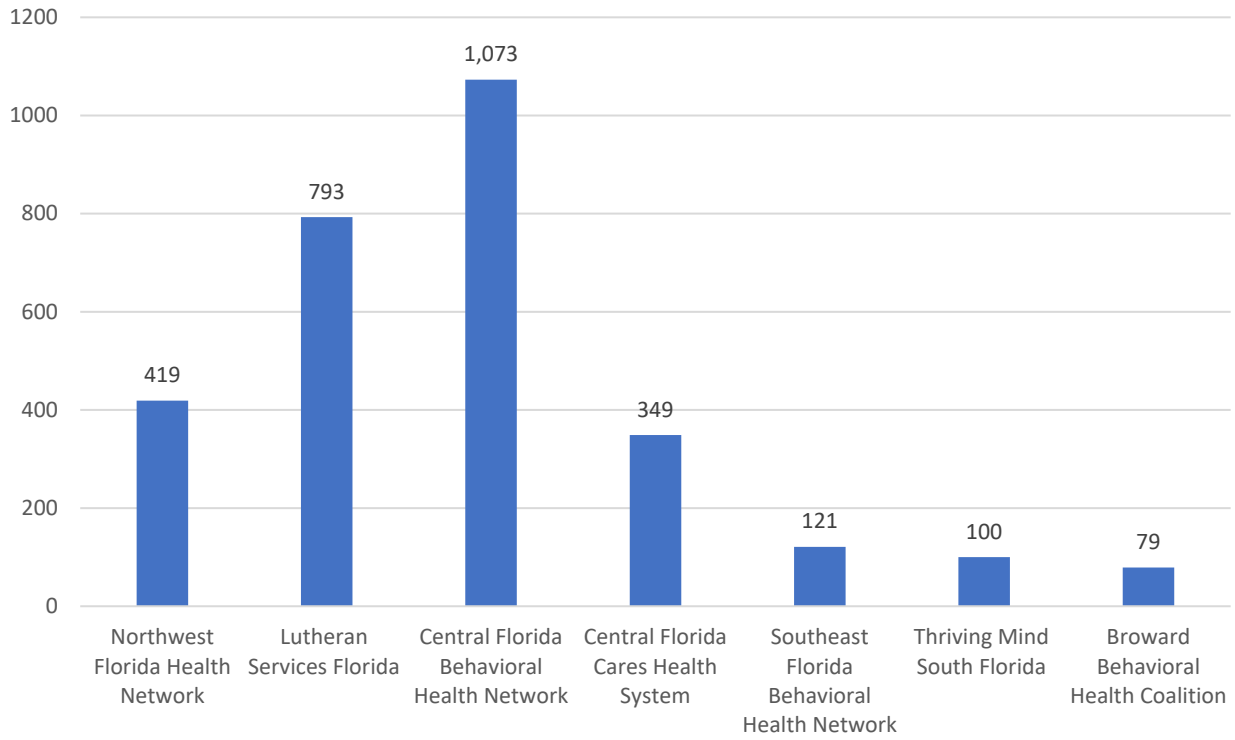


Figure 54. Methamphetamine-related Deaths Among Decedents for Managing Entities, 2021. Source: FDLE.

Conclusions

Adult Substance Use

Misuse of prescription opioids slowly and steadily declined from 2015 to 2021 in the U.S. and Florida. Small increases in use of heroin occurred in 2020 across the U.S. but in Florida, heroin use has decreased. Rates of alcohol use have remained largely unchanged in Florida until 2020, with an increase in past year use. Although rates of cocaine use declined from 2015-2020, cocaine-related deaths continue to increase, specifically in Florida. Methamphetamine-related deaths have also been increasing steadily since 2015. 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.

Youth Substance Use

The prevalence of substance use among Florida youth has remained 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 declined. Lifetime, past-year, and past-month use of cocaine has steadily declined among Florida youth throughout the period of observation from 2015-2022. The trend for methamphetamine use has also been downward. Additionally, vaping nicotine and marijuana has been decreasing over time. Rates of lifetime, past-year, and past-month use of marijuana among Florida youth have been stable over time, with a continuing downward trend. In the same period, lifetime, past-year, and past-month rates of alcohol use have been declining more quickly among Florida youth compared to marijuana. Lifetime use of club drugs among Florida youth declined throughout the entire period from 2010-2021.

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. First half of 2022 data show that non-fatal poisonings may have decreased from 2021.

Fatal Poisonings

While Florida fatal drug poisonings declined in 2018 for the first time since 2013, increases in fatal drug deaths have continued to occur since 2019. An increase in fatal drug deaths occurred from 2020 to 2021. In addition, death due to fentanyl and fentanyl analogues increased in 2021 from the previous year. Polysubstance use continues to be involved in an increasing number of drug poisoning deaths, particularly related to opioids with cocaine and methamphetamine.

Emerging Substances

Xylazine is a veterinary tranquilizer that is being mixed with heroin, fentanyl, and cocaine. The substance can cause skin ulcers and abscesses but ultimately increases risk for overdose. Although not required to report, there were 236 occurrences of xylazine reported from the Florida Medical Examiners Commission for 2021.

“Gas Station Heroin” is named for its convenience to find whether it’d be purchased online, at convenience stores, or in gas stations. Tianeptine is being sold at gas stations and can have opioid-like properties. It’s marketed as a dietary supplement; however, the pills being sold are unregulated.

“Benzo dope” received its name for co-abusing illicit benzodiazepines with opioids, most commonly used with fentanyl. The illicit benzodiazepine supply has increased in the US since 2019. The co-abuse of benzos and opioids are the increased risk for overdoses since both substances cause sedation and decreased breathing.

Data Sources

Bureau of Economic and Business Research (BEBR), Florida Estimates of Population, Population Studies Program (2022)

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

Centers for Disease Control and Prevention (CDC). National Center for Health Statistics. Drug Overdose Mortality by State. (2022)

Florida Department of Children and Families (DCF). Florida Youth Substance Abuse Survey (FYSAS). (2000 – 2022)

Florida Department of Health. Opioid Use Dashboard. FL Health Charts (2015 -2021)

Florida Department of Law Enforcement (FDLE). Drugs Identified in Deceased Persons by Florida Medical Examiners Commission (MEC). (2003 – 2021)

Monitoring the Future National Survey Results on Drug Use (MTF). (1975 - 2022). Monitoring the Future (2022).

National Institute on Drug Abuse (2022). Most reported substance use among adolescents held steady in 2022

Substance Abuse and Mental Health Services Administration (SAMHSA). (2002 – 2021). 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