

PATTERNS OF AND TRENDS IN SUBSTANCE USE IN FLORIDA

Overall and by Region

Annual Report, 2020



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Patterns of and Trends in Substance Use in Florida, Overall and by Managing Entity Region

Annual Report

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TABLE OF CONTENTS

LIST OF TABLES..... V

LIST OF FIGURES VI

INTRODUCTION 1

METHODS 1

 INJURY PYRAMID FOR SUBSTANCE USE..... 1

 MANAGING ENTITIES 3

 AGE 4

 DATA SOURCES 5

POPULATION..... 6

SUBSTANCE USE 8

 OPIOIDS..... 8

Pain Reliever Misuse among Adults 9

Pain Reliever Misuse among Youth..... 9

Heroin Use among Adults 10

Heroin Use among Youth 12

 PSYCHOSTIMULANT USE 13

Cocaine Use among Adults..... 13

Cocaine Use among Youth 19

Methamphetamine Use among Adults..... 26

Methamphetamine Use among Youth..... 27

 MARIJUANA USE 34

Marijuana Use among Adults 34

Marijuana Use among Youth 39

 ALCOHOL USE..... 48

Alcohol Use among Adults 48

Alcohol Use among Youth 50

 INHALANT USE 53

Inhalant Use among Youth 53

 HALLUCINOGEN USE 55

Hallucinogen Use among Youth..... 55

 CLUB DRUG USE..... 61

Club Drug Use among Youth 62

SELECT CONSEQUENCES OF SUBSTANCE USE	67
ARRESTS AND CITATIONS	67
<i>Drug Arrests</i>	68
<i>Citations for Driving Under the Influence of Alcohol</i>	73
ALCOHOL- AND DRUG-RELATED MOTOR VEHICLE CRASHES, INJURIES, AND FATALITIES	78
<i>Motor Vehicle Crashes Confirmed to Involve Alcohol</i>	78
<i>Motor Vehicle Crashes Confirmed to Involve Drugs Other than Alcohol</i>	85
<i>Motor Vehicle Crashes Confirmed to Involve Both Drugs and Alcohol</i>	92
MORBIDITY	98
EMERGENCY ROOM VISITS	98
HOSPITALIZATIONS.....	105
MORTALITY: FATAL POISONING	112
OPIOIDS.....	113
STIMULANTS.....	116
ALCOHOL	118
CANNABIS	119
KRATOM	120
POLY-SUBSTANCE	122
CONCLUSIONS.....	126
ADULT SUBSTANCE USE	126
YOUTH SUBSTANCE USE	126
ARRESTS	127
CITATIONS.....	127
MOTOR VEHICLE CRASHES	127
NON-FATAL POISONINGS	128
FATAL POISONINGS.....	128
DATA SOURCES	128
REFERENCES	130

LIST OF TABLES

- Table 1 Estimated population (including inmates) in 1,000 by age group, by Managing Entity Region, Florida, 2019.
- Table 2 Total Drug-involved Deaths and Polysubstance Deaths, Florida, 2003 – 2018.

LIST OF FIGURES

- Figure 1 Injury pyramid adapted to represent the consequences of substance use.
- Figure 2 Iceberg representation of the opioid epidemic, US, 2015.
- Figure 3 Florida by Department of Children and Families region, managing entity region, circuit, and county.
- Figure 4 Estimated population (excluding inmates), by Managing Entity Region, Florida, 2019.
- Figure 5 Two-Year Average Past-Year Pain Reliever Misuse among Adults, United States and Florida, 2002 – 2018.
- Figure 6 Two-Year Average Past-Year Pain Reliever Misuse among Youth, United States and Florida, 2002 – 2018.
- Figure 7 Two-Year Average Past-year Heroin Use among Adults, United States and Florida, 2013 – 2018.
- Figure 8 Three-Year Average Past-year Heroin Use among Adults, Florida and Managing Entity Regions, 2016 – 2018.
- Figure 9 Two-Year Average Past-year Heroin Use among Youth, United States and Florida, 2013 – 2018.
- Figure 10 Heroin Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 11 Two-Year Average Past-year Cocaine Use among Adults, United States and Florida, 2002 – 2018.
- Figure 12 Three-Year Average Past-year Cocaine Use among Adults, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 13 Three-Year Average Past-year Cocaine Use among Adults, Florida and Big Bend Community Based Care, 2002 – 2018.
- Figure 14 Three-Year Average Past-year Cocaine Use among Adults, Florida and Central Florida Cares Health System, 2002 – 2018.
- Figure 15 Three-Year Average Past-year Cocaine Use among Adults, Florida and Lutheran Services Florida, 2002 – 2018.
- Figure 16 Three-Year Average Past-year Cocaine Use among Adults, Florida and Central Florida Behavioral Health Network, Inc., 2002 – 2018.
- Figure 17 Three-Year Average Past-year Cocaine Use among Adults, Florida and Southeast Florida Behavioral Health Network, 2002 – 2018.
- Figure 18 Three-Year Average Past-year Cocaine Use among Adults, Florida and Broward Behavioral Health Coalition, 2002 – 2018.

- Figure 19 Three-Year Average Past-year Cocaine Use among Adults, Florida and South Florida Behavioral Health Network, Inc., 2002 – 2018.
- Figure 20 Two-Year Average Past-year Cocaine Use among Youth, United States and Florida, 2002 – 2018.
- Figure 21 Three-Year Average Past-year Cocaine Use among Youth, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 22 Cocaine Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 23 Lifetime Cocaine Use among Youth, Florida and Managing Entity Regions, 2010 – 2018.
- Figure 24 Lifetime Cocaine Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2010 – 2018.
- Figure 25 Lifetime Cocaine Use among Youth, Florida and Big Bend Community Based Care, 2010 – 2018.
- Figure 26 Lifetime Cocaine Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 27 Lifetime Cocaine Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018.
- Figure 28 Lifetime Cocaine Use among Youth, Florida and South Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 29 Lifetime Cocaine Use Among Youth, Florida and Central Florida Cares Health System, 2010 – 2018.
- Figure 30 Lifetime Cocaine Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018.
- Figure 31 Past Month Cocaine Use among Youth, Florida and Managing Entity Regions, 2010 – 2018.
- Figure 32 Two-Year Average Past-year Methamphetamine Use among Adults, United States and Florida, 2002 – 2018.
- Figure 33 Two-Year Average Past-year Methamphetamine Use among Youth, United States and Florida, 2002 – 2018.
- Figure 34 Methamphetamine Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 35 Lifetime Methamphetamine Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 36 Past Month Methamphetamine Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 37 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Big Bend Community Based Care, 2004 – 2018.

- Figure 38 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Lutheran Services Florida, 2004 – 2018.
- Figure 39 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Central Florida Behavioral Health Network, Inc., 2004 – 2018.
- Figure 40 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Central Florida Cares Health System, 2004 – 2018.
- Figure 41 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Southeast Florida Behavioral Health Network, 2004 – 2018.
- Figure 42 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and South Florida Behavioral Health Network, Inc., 2004 – 2018.
- Figure 43 Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Broward Behavioral Health Coalition, 2004 – 2018.
- Figure 44 Two-Year Average Marijuana Use Among Adults, Past Year and Past Month, United States and Florida, 2002 – 2018.
- Figure 45 Three-Year Average Past Month Marijuana Use among Adults, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 46 Three-Year Average Past-year Marijuana Use among Adults, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 47 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Big Bend Community Based Care, 2002 – 2018.
- Figure 48 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Lutheran Services Florida, 2002 – 2018.
- Figure 49 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Central Florida Behavioral Health Network, Inc., 2002 – 2018.
- Figure 50 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Central Florida Cares Health System, 2002 – 2018.
- Figure 51 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Southeast Florida Behavioral Health Network, 2002 – 2018.
- Figure 52 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Broward Behavioral Health Coalition, 2002 – 2018.
- Figure 53 Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and South Florida Behavioral Health Network, Inc., 2002 – 2018.
- Figure 54 Two-Year Average Marijuana Use among Youth, Past Year and Past Month, United States and Florida, 2002 – 2018.
- Figure 55 Three-Year Average Past-year Marijuana Use among Youth, Florida and Managing Entity Regions, 2002 – 2018.

- Figure 56 Three-Year Average Past-year Marijuana Use among Youth, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 57 Marijuana Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 58 Lifetime Marijuana Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 59 Lifetime Marijuana Use among Youth, Florida and Lutheran Services Florida, 2004 – 2018.
- Figure 60 Lifetime Marijuana Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2004 – 2018.
- Figure 61 Lifetime Marijuana Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2004 – 2018.
- Figure 62 Lifetime Marijuana Use among Youth, Florida and Big Bend Community Based Care, 2004 – 2018.
- Figure 63 Lifetime Marijuana Use among Youth, Florida and Central Florida Cares Health System, 2004 – 2018.
- Figure 64 Lifetime Marijuana Use among Youth, Florida and Broward Behavioral Health Coalition, 2004 – 2018.
- Figure 65 Lifetime Marijuana Use among Youth, Florida and South Florida Behavioral Health Network, Inc., 2004 – 2018.
- Figure 66 Past Month Marijuana Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 67 Lifetime Synthetic Marijuana Use among Youth, Florida and Managing Entity Regions, 2011 – 2019.
- Figure 68 Past Month Synthetic Marijuana Use among Youth, Florida and Managing Entity Regions, 2011 – 2019.
- Figure 69 Two-Year Average Past Month Alcohol Use among Adults, United States and Florida, 2002 – 2018.
- Figure 70 Three-Year Average Past Month Alcohol Use among Adults, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 71 Two-Year Average Past Month and Binge Alcohol Use among Youth, United States and Florida, 2002 – 2018.
- Figure 72 Three-Year Average Past Month Alcohol Use among Youth, Florida and Managing Entity Regions, 2002 – 2018.
- Figure 73 Alcohol Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 74 Lifetime Alcohol Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 75 Past Month Alcohol Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.

- Figure 76 Inhalant Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 77 Lifetime Inhalant Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 78 Past-month Inhalant Use among Youth, Florida and Managing Entity Regions, 2004 – 2018.
- Figure 79 Hallucinogen Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019.
- Figure 80 Lifetime Hallucinogen Use among Youth, Florida and Managing Entity Regions, 2010 – 2018.
- Figure 81 Lifetime Hallucinogen Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018.
- Figure 82 Lifetime Hallucinogen Use among Youth, Florida and Big Bend Community Based Care, 2010 – 2018.
- Figure 83 Lifetime Hallucinogen Use among Youth, Florida and Central Florida Behavioral Health Network, 2010 – 2018.
- Figure 84 Lifetime Hallucinogen Use among Youth, Florida and South Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 85 Lifetime Hallucinogen Use among Youth, Florida and Central Florida Cares Health System, 2010 – 2018.
- Figure 86 Lifetime Hallucinogen Use among Youth, Florida and Southeast Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 87 Lifetime Hallucinogen Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018.
- Figure 88 Past Month Hallucinogen Use among Youth, Florida and Managing Entity Regions, 2010 – 2018.
- Figure 89 Lifetime Club Drug Use among Youth, Florida and Managing Entity Regions, 2010 – 2019.
- Figure 90 Lifetime Club Drug Use among Youth, Florida and Big Bend Community Based Care, 2010 – 2018.
- Figure 91 Lifetime Club Drug Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018.
- Figure 92 Lifetime Club Drug Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 93 Lifetime Club Drug Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2010 – 2018.
- Figure 94 Lifetime Club Drug Use among Youth, Florida and South Florida Behavioral Health Network, Inc., 2010 – 2018.
- Figure 95 Lifetime Club Drugs Use among Youth, Florida and Central Florida Cares Health System, 2010 – 2018.

- Figure 96 Lifetime Club Drugs Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018.
- Figure 97 Total Arrests, Florida and Managing Entity Regions, 2000 – 2019.
- Figure 98 Drug Arrests, Florida and Managing Entity Regions, 2000 – 2019.
- Figure 99 Drug Arrests, Florida and Managing Entity Regions, 2000 – 2019.
- Figure 100 Drug Arrests, Florida and Big Bend Community Based Care, 2000 – 2019.
- Figure 101 Drug Arrests, Florida and Lutheran Services Florida, 2000 – 2019.
- Figure 102 Drug Arrests, Florida and Central Florida Cares Health System, 2000 – 2019.
- Figure 103 Drug Arrests, Florida and Central Florida Behavioral Health Network, Inc., 2000 – 2019.
- Figure 104 Drug Arrests, Florida and Southeast Florida Behavioral Health Network, 2000 – 2019.
- Figure 105 Drug Arrests, Florida and South Florida Behavioral Health Network, Inc., 2000 – 2019.
- Figure 106 Drug Arrests, Florida and Broward Behavioral Health Coalition, 2000 – 2019.
- Figure 107 DUI Citations, Florida and Managing Entity Regions, 2011 – 2019.
- Figure 108 DUI Citations, Florida and Central Florida Behavioral Health Network, Inc., 2011 – 2019.
- Figure 109 DUI Citations, Florida and Big Bend Community Based Care, 2011 – 2019.
- Figure 110 DUI Citations, Florida and Lutheran Services Florida, 2011 – 2019.
- Figure 111 DUI Citations, Florida and Southeast Florida Behavioral Health Network, 2011 – 2019.
- Figure 112 DUI Citations, Florida and Central Florida Cares Health System, 2011 – 2019.
- Figure 113 DUI Citations, Florida and Broward Behavioral Health Coalition, 2011 – 2019.
- Figure 114 DUI Citations, Florida and South Florida Behavioral Health Network, Inc., 2011 – 2019.
- Figure 115 Alcohol Confirmed Crashes, Florida and Managing Entity Regions, 2011 – 2019.
- Figure 116 Alcohol Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 117 Alcohol Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 118 Alcohol Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 119 Alcohol Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care, 2011 – 2019.
- Figure 120 Alcohol Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2011 – 2019.
- Figure 121 Alcohol Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2011 – 2019.
- Figure 122 Alcohol Confirmed Crashes and Fatalities, Florida and Central Florida Cares Health System, 2011 – 2019.

- Figure 123 Alcohol Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2011 – 2019.
- Figure 124 Alcohol Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2011 – 2019.
- Figure 125 Alcohol Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc., 2011 – 2019.
- Figure 126 Drug Confirmed Crashes, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 127 Drug Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 128 Drug Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 129 Drug Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care, 2013 – 2019.
- Figure 130 Drug Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2013 – 2019.
- Figure 131 Drug Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2013 – 2019.
- Figure 132 Drug Confirmed Crashes and Fatalities, Florida and Central Florida Cares Health System, 2013 – 2019.
- Figure 133 Drug Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2013 – 2019.
- Figure 134 Drug Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2013 – 2019.
- Figure 135 Drug Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc., 2013 – 2019.
- Figure 136 Alcohol and Drug Confirmed Crashes, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 137 Alcohol and Drug Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 138 Alcohol and Drug Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019.
- Figure 139 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care, 2013 – 2019.
- Figure 140 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2013 – 2019.
- Figure 141 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2013 – 2019.
- Figure 142 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Central Florida Cares Health System, 2013 – 2019.
- Figure 143 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2013 – 2019.

- Figure 144 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2013 – 2019.
- Figure 145 Alcohol and Drug Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc., 2013 – 2019.
- Figure 146 Emergency Department Visits due to Poisoning, Overall and Drug-specific, United States and Florida, 2007 – 2018.
- Figure 147 Emergency Department Visits due to Poisoning, Florida and Managing Entity Regions, 2007 – 2018.
- Figure 148 Emergency Department Visits due to Drug Poisoning, Florida and Managing Entity Regions, 2016 – 2018.
- Figure 149 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Big Bend Community Based Care, 2007 – 2018.
- Figure 150 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Lutheran Services Florida, 2007 – 2018.
- Figure 151 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Behavioral Health Network, Inc., 2007 – 2018.
- Figure 152 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Cares Health System, 2007 – 2018.
- Figure 153 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Southeast Florida Behavioral Health Network, 2007 – 2018.
- Figure 154 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Broward Behavioral Health Coalition, 2007 – 2018.
- Figure 155 Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and South Florida Behavioral Health Network, Inc., 2007 – 2018.
- Figure 156 Hospitalization due to Poisoning, Overall and Drug-specific, United States and Florida, 2007 – 2018.
- Figure 157 Hospitalization due to Poisoning, Florida and Managing Entity Regions, 2007 – 2018.
- Figure 158 Hospitalization due to Drug Poisoning, Florida and Managing Entity Regions, 2016 – 2018.
- Figure 159 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Big Bend Community Based Care, 2007 – 2018.
- Figure 160 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Lutheran Services Florida, 2007 – 2018.
- Figure 161 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Behavioral Health Network, Inc., 2007 – 2018.
- Figure 162 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Cares Health System, 2007 – 2018.

- Figure 163 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Southeast Florida Behavioral Health Network, 2007 – 2018.
- Figure 164 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Broward Behavioral Health Coalition, 2007 – 2018.
- Figure 165 Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and South Florida Behavioral Health Network, Inc., 2007 – 2018.
- Figure 166 Age-Adjusted Mortality Rate, Overall and Drug Poisoning, United States and Florida, 1999 – 2018.
- Figure 167 Age-Adjusted Mortality Rate, Any Opioid, United States and Florida, 1999 – 2018.
- Figure 168 Age-Adjusted Mortality Rate, Natural or Semi-Synthetic Opioid, United States and Florida, 1999 – 2018.
- Figure 169 Age-Adjusted Mortality Rate, Heroin, United States and Florida, 1999 – 2018.
- Figure 170 Age-Adjusted Mortality Rate, Synthetic Opioid*, United States and Florida, 1999 – 2018.
*Excludes Methadone.
- Figure 171 Age-Adjusted Mortality Rate, Cocaine, United States and Florida, 1999 – 2018.
- Figure 172 Age-Adjusted Mortality Rate, Psychostimulants, United States and Florida, 1999 – 2018.
*Excludes Cocaine.
- Figure 173 Age-Adjusted Mortality Rate, Alcohol Poisoning, United States and Florida, 1999 – 2018.
- Figure 174 Age-Adjusted Mortality Rate, Alcohol Poisoning, United States and Florida, 1999 – 2018.
- Figure 175 Age-Adjusted Mortality Rate, Cannabis, United States and Florida, 1999 – 2018. *Missing points indicate suppressed data.
- Figure 176 Age-Adjusted Mortality Rate, Cannabis, United States and Florida, 1999 – 2018.
- Figure 177 Kratom Detected Deaths, Florida, 2014 – 2019.
- Figure 178 Kratom Detected Deaths, Florida, 2014 – 2019.
- Figure 179 Top 10 Co-Occurring Substances among Kratom Detected Deaths in Florida, 2018.
- Figure 180 Top 10 Co-Occurring Substances among Fentanyl Caused Deaths in Florida, 2018.
- Figure 181 Top 10 Co-Occurring Substances among Fentanyl Analogs Caused Deaths in Florida, 2018.
- Figure 182 Top 10 Co-Occurring Substances among Heroin Caused Deaths in Florida, 2018.
- Figure 183 Top 10 Co-Occurring Substances among Cocaine Caused Deaths in Florida, 2018.
- Figure 184 Top 10 Co-Occurring Substances among Methamphetamine Caused Deaths in Florida, 2018.
- Figure 185 Top 10 Co-Occurring Substances among Ethanol Caused Deaths in Florida, 2018.

INTRODUCTION

The behavioral health workforce in Florida is comprised of myriad professionals tasked with promoting the health and well-being of Floridians through not only prevention and early intervention strategies that reduce the impact of substance use and mental health disorders but also person-centered treatment to those Floridians managing mental health disorders, including substance use disorder. In order to effectively target limited resources to prevent, delay initiation of, and treat existing substance use disorders, the state, regional, and local behavioral health workforce must be aware of current patterns and trends in substance use and abuse across the state. Thus, this report provides an overview of current patterns and trends over time of substance use and select consequences among Floridians. For context, statewide data are presented alongside comparable national data.

METHODS

This section details the way in which data are organized and presented in the report. In addition, each source from which data were obtained is described. Finally, the approach to calculating frequencies is detailed if the data were not available in the desired format from the source.

INJURY PYRAMID FOR SUBSTANCE USE

The burden of disease associated with substance use can be visually represented with a pyramid, ranging from the rarest event, death, at the top of the pyramid to the most common event, an at-risk behavior, at the bottom of the pyramid (**Error! Not a valid bookmark self-reference.**).

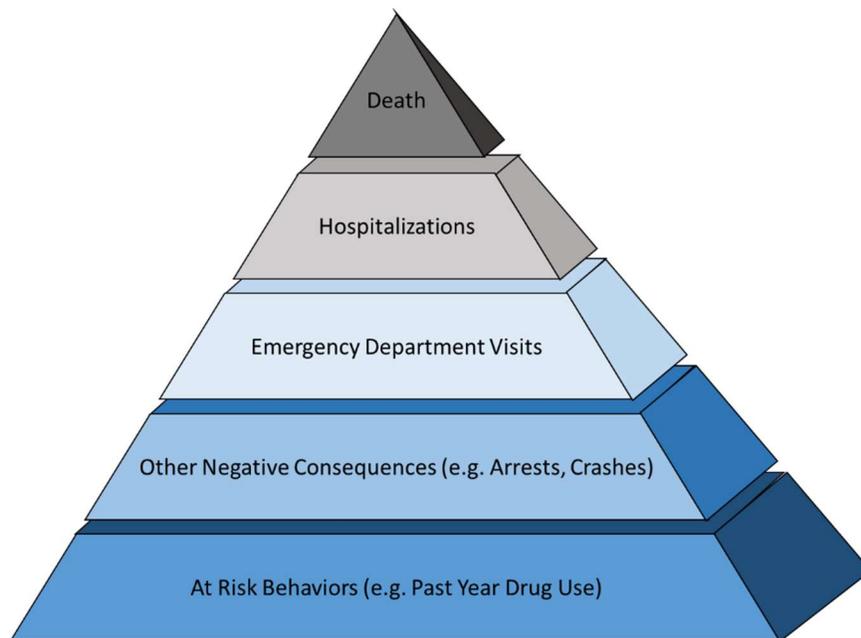


Figure 1. Injury pyramid adapted to represent the consequences of substance use.

Note that the incidence of events is inversely proportional to the severity of the category of the event with the least consequential events to health and well-being represented at the bottom of the pyramid and the most consequential events occurring at the top of the pyramid. In this report, the approach taken to present the epidemiologic data characterizing substance use in Florida is based on the way in which events are depicted in the pyramid, also ranging from the least rare and severe events to the most rare and severe events. In addition, the number of events depicted by the pyramid is inversely proportional to the robustness of the surveillance system from which epidemiologic data can be obtained about substance use. The vital statistics system through which fatal poisonings are tracked is the most extensive system, especially in the wake of the ongoing opioid epidemic, as many resources have been devoted to enhancing surveillance of drug-related deaths, in particular. Conversely, prevalence data for substance use is more difficult to obtain, often reliant on self-reported behavioral data collected through surveys administered to only a sample of the population of interest. Such surveys are expensive to conduct and are consequently done so at less frequent intervals and/or with limited geographic granularity.

This type of figure is often described like an iceberg, only the tip of which is apparent above the surface of the water, representing that the most severe events associated with substance use are the easiest to identify and characterize. For example, in 2015, for every one prescription or illicit opioid overdose death in the United States, there were 18 people with a substance use disorder involving heroin and another 62 people who had a substance use disorder involving prescription opioids (Figure 2).

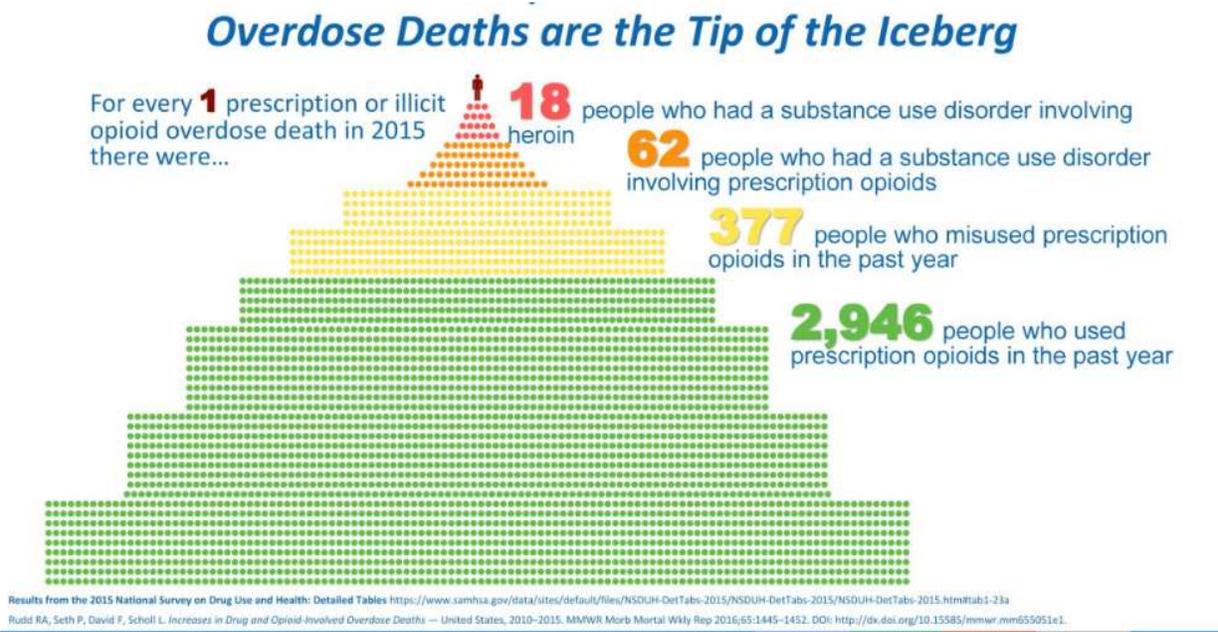


Figure 2. Iceberg representation of the opioid epidemic, US, 2015. Source: [CDC National Center for Injury Prevention and Control](#).

For every fatal overdose, there are more nonfatal overdoses that require treatment, even more people that misuse substances, and still a greater number that use substances.

MANAGING ENTITIES

The Florida Department of Children and Families (DCF) contracts with seven regional systems of care known as Managing Entities (ME) 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 ME to respond to the specific behavioral health needs of its region within Florida. With the exception of one, each region is comprised of a group of geographically-contiguous counties (Figure 3). Note that when DCF was reorganized in 2007, Florida was divided into twenty circuits that align with the state's judicial circuits.

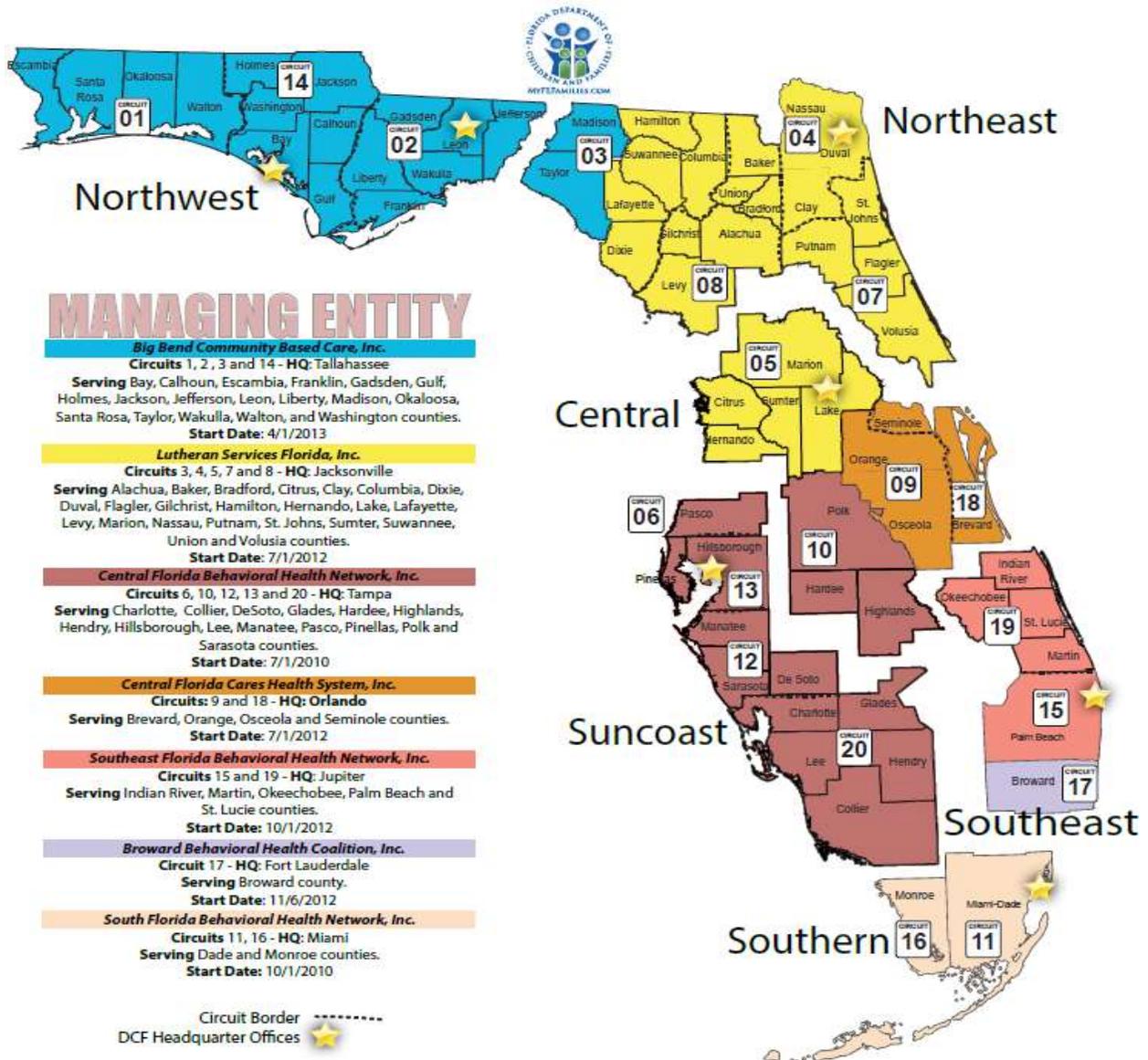


Figure 3. Florida by Department of Children and Families region, managing entity region, circuit, and county. Source: [Florida Department of Children and Families](http://www.myfloridafamilies.com).

Two counties located in the northeast and all of the counties located in the northwest region of Florida are served by Big Bend Community Based Care (BBCBC) dba Northwest Florida Health Network (NWF Health); the eighteen counties in the panhandle of Florida served by BBCBC dba 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 3, the region served by BBCBC dba 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 the color 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 the color orange.

The sun coast 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 CFBHN is represented in graphs throughout the report in the color 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 the color salmon.

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

The southern region of Florida, comprised of Monroe and Dade counties is served by South Florida Behavioral Health Network, Inc. (SFBHN) dba Thriving Mind South Florida. The region served by SFBHN dba 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 by Managing Entity Region 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.

DATA SOURCES

Data presented in this report were obtained from a diverse number of sources. The latest data available through May 2020 from each source is included in the report. Data were obtained in two different ways: directly from the agency that collects and maintains the data or through public-facing dashboards maintained by the source agency itself or a partner agency. To present some frequencies, such as rates, data were aggregated, and the measure of occurrence calculated.

Florida county population data and estimates from 2000 to 2019 were obtained 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](#) (CHARTS).

Data on substance use among adults in the United States and Florida were obtained from the [National Survey On Drug Use and Health](#) (NSDUH), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Center for Disease Control and Prevention's [Behavioral Risk Factor Surveillance System](#) (BRFSS). Both sources provide the prevalence of substance use based on responses to their respective surveys. Prevalence rates were also obtained for sub-state regions, which were weighted by population and summed to calculate a prevalence rate for each Managing Entity Region from the [National Survey on Drug Use and Health](#) (NSDUH). Unfortunately, due to the way in which data were aggregated by NSDUH for sub-state regions, prevalence rates for Madison and Taylor County are included in the region served by Lutheran Services Florida instead of the region served by Big Bend Community Based Care for the following reporting periods: 2004-2006, 2006-2008, 2008-2010, and 2010-2012.

Prevalence rates estimated using data from the National Survey on Drug Use and Health for the United States and Florida are two-year running averages, while prevalence rates for Managing Entity Regions are three-year running averages. Throughout the report, two- and three-year running average rates are plotted at the midpoint of the period. For example, the 2017-2018 average prevalence is plot at 2017.5, and the 2014-2106 average prevalence for a single Managing Entity Region (MER) is plot at 2015.

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.

Data for substance use among youth in the United States were obtained from [Monitoring the Future](#) (MTF), sponsored by the National Institute on Drug Abuse (NIDA), and the [National Survey on Drug Use and Health](#) (NSDUH). Data for substance use among youth in Florida were obtained from the [Florida Youth Substance Abuse Survey](#) (FYSAS), sponsored by the Department of Children and Families, and the [National Survey on Drug Use and Health](#) (NSDUH). The FYSAS is based on the methodology and survey

items used in the Monitoring the Future survey. Prevalence rates were calculated from data obtained from NSDUH in the same way for youth as described for adults earlier in this section. Prevalence rates from MTF and FYSAS were obtained directly from the respective sources and did not have to be calculated.

FYSAS data were obtained from data tables on the Department of Children and Families website. The survey is administered to a statewide sample of students; odd years include state level data only, while even years include state and regional level data. The regional data represent only one year, not a combination of years.

Additional data related to the consequences of substance use were obtained. Sources include motor vehicle crash data from the [Florida Department of Highway Safety and Motor Vehicles](#) (FLHSMV) and arrest data from [Annual Uniform Crime Reports](#), maintained by the Florida Department of Law Enforcement (FDLE). Both of these sources contain unadjusted rates that were calculated using counts from their respective source and population estimates from the [Florida Estimates of Population, Population Studies Program](#).

Morbidity (hospitalizations and emergency department visits) rates for the United States are age-adjusted and obtained from the Center for Disease Control and Prevention's [Web-based Injury Statistics Query and Reporting System](#) (WISQARS). Data for Florida-specific morbidity were obtained from the [Florida Agency for Health Care Administration](#) (AHCA) through the public-facing dashboard [FL Health CHARTS, maintained by the Florida Bureau of Community Health Assessment and Vital Statistics](#). Morbidity rates for Florida overall are age-adjusted and obtained directly from [FL Health CHARTS](#). Morbidity rates for sub-Florida regions are unadjusted and were calculated using counts of hospitalizations and emergency department visits from [FL Health CHARTS](#) and population estimates from the [Florida Estimates of Population, Population Studies Program](#). County morbidity data are considered suppressed if the count is 4 or less. In this case, a random value between 0 and 4 was used for that county's morbidity count, which was then summed with other county-specific counts to calculate region-specific rates.

Mortality rates for Florida and the United States from 1999 to 2018 are age-adjusted and were obtained from the [Wide Ranging Online Data for Epidemiologic Research](#) (WONDER) tool, maintained by the Centers for Disease Control and Prevention. Regional mortality rates reported for the State of Florida are unadjusted. These rates were calculated using death counts from the [Drugs Identified in Deceased Persons Report](#), produced by the Florida Department of Law Enforcement (FDLE), and population estimates from the [Florida Estimates of Population, Population Studies Program](#). Polysubstance deaths cannot be determined from the report itself, and were instead obtained using raw, individual-level death data obtained directly from the Medical Examiners Commission. These data were obtained through a public records request through the Florida Department of Law Enforcement.

POPULATION

The estimated total population in Florida by April 2019 was 21,268,553, including inmates (21,091,609, when excluding inmates).

The estimated total youth population in Florida during 2019 was 1,445,839, about 6.8% of the total Florida population. This is an increase of 1.1% over 2018. The estimated total adult population in Florida during 2019 was 17,042,026, about 80.1% of the total Florida population. This is an increase of 1.6% over 2018.

Of the seven regions, the Central Florida Behavioral Health Network, Inc., serves the largest population with over 5.9 million people, 28% of Florida’s population. Big Bend Community Based Care dba NWF Health serves the smallest population, just under 1.5 million people, 7% of the state’s population, dispersed throughout a larger geographic area.

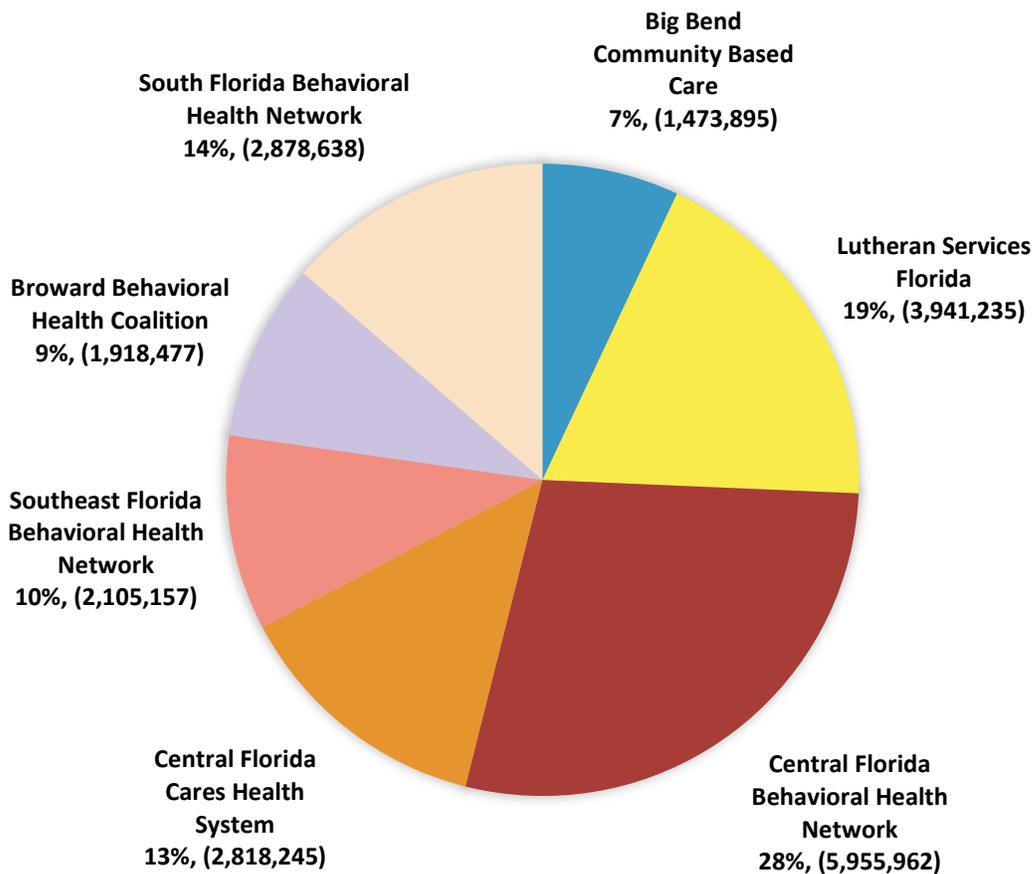


Figure 4. Estimated population (excluding inmates), by Managing Entity Region, Florida, 2019. Total Population = 21,081,609. Source: [FL BEBR](#).

Population estimates for children (aged 0 – 11 years, who are otherwise not included in this report), youth (aged 12-17 years), and adults (aged 18 years and older), for Florida, as a whole, and for each of the seven Managing Entity Regions, with the corresponding percentage of the population comprised of each demographic, are presented in Table 1. The region comprised of the highest percentage of adults is served by the Southeast Florida Behavioral Network; however, there is very little difference in the number of adults comprising each region served by an ME, ranging from 79% to 81% of the population.

	Total	0 – 11 Years N (%)	12 -17 Years N (%)	18+ Years N (%)
BBCBC	1,536.8	210.8 (13.7)	111.9 (7.3)	1,214.1 (79)
LSF	3,983.9	514.7 (12.9)	266.5 (6.9)	3,202.7 (80)
CFBHN	5,970.7	741.8 (12.4)	388.5 (6.5)	4,840.3 (81)
CFCHS	2,824.1	396.2 (14.0)	210.1 (7.4)	2,217.8 (79)
SEFBHN	2,122.3	258.6 (12.2)	138.4 (6.5)	1,725.3 (81)
BBHC	1,927.0	269.2 (14.0)	135.4 (7.0)	1,522.4 (79)
SFBHN	2,903.8	389.3 (13.4)	195.0 (6.7)	2,319.4 (80)
FL	21,268.6	2,780.7 (13.1)	1,445.8 (6.8)	17,042.0 (80)

Table 1. Estimated population (including inmates) in 1,000 by age group, by Managing Entity Region, Florida, 2019. Source: [FL BEBR](#).

While Central Florida Behavioral Health Network, Inc. serves the largest population overall, youth aged 12-17 years comprise the smallest proportion (6.5%) of the population served among all of the Managing Entity Regions. In contrast, the region with the largest percentage (7.4%) of the population that is comprised of youth aged 12 – 17 years is the one served by Central Florida Cares Health System. Notably, there is little variability in the proportion of the population served that is comprised of 12 – 17 year-olds among the regions.

SUBSTANCE USE

Substance use is common, though it can lead to negative health consequences. Indeed, even use of over-the-counter and prescription medication used for therapeutic purposes is not without risk, as medications have side effects and some have abuse potential. Two such classes include opioid medications used to treat pain and stimulant medications used to treat conditions such as Attention Deficit Hyperactivity Disorder, also known as ADHD.

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 Region.

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), pain reliever misuse among adults in Florida in the past year has increased in recent years to 4.4%, following a slow decline in use beginning in the mid-2000s (Figure 5). During the same period in the US overall, rates have remained largely unchanged. Thus, though use among Floridians has been tracking below that of the US since 2006-2007, recent increases in use in Florida have pushed the prevalence in the state above that of the nation (3.9%). It should be noted that the way in which data related to pain reliever misuse has been described and collected during NSDUH has changed over time; thus, the break in the series for the 2014-2015 prevalence.

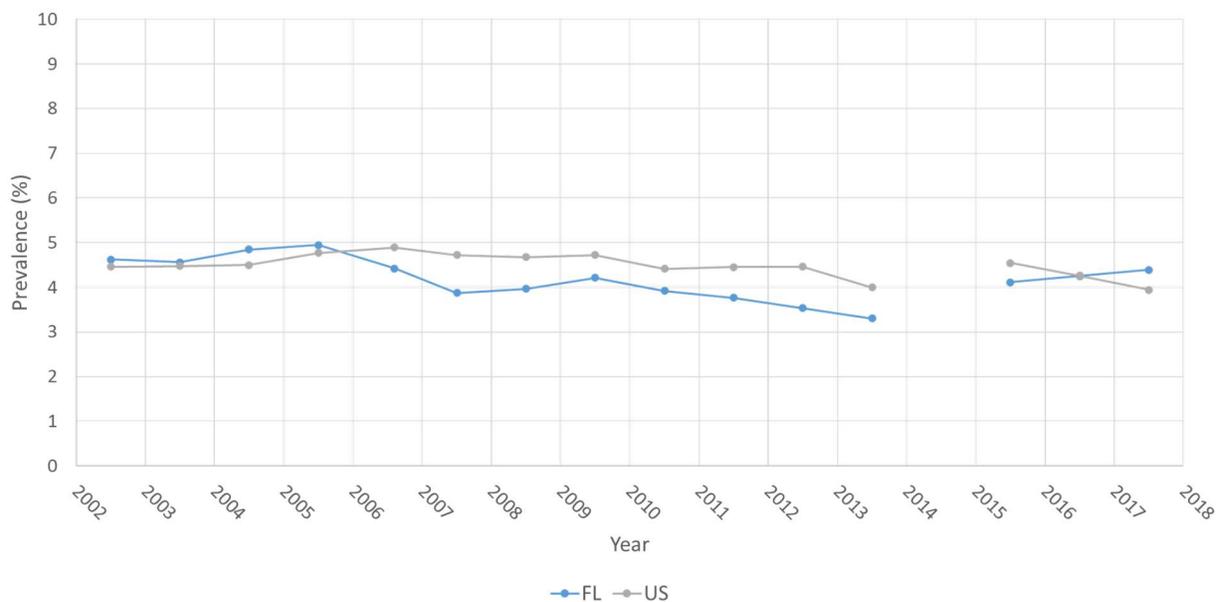


Figure 5. Two-Year Average Past-Year Pain Reliever Misuse among Adults, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

Pain Reliever Misuse among Youth

The pattern of misuse of opioid pain relievers among youth differs from that of adults (Figure 6). In both Florida and the US as a whole, the prevalence of misuse among youth was higher than that of adults at the beginning of the period of observation (7.0% and 7.6%, respectively), but following a steady decline, is now below the prevalence of misuse among adults, at 3.0% and 2.9%, respectively. The same change in the way in which these data are collected during NSDUH impacted youth as well, resulting in a break in the series for the 2014-2015 estimate. As among adults, these numbers should be interpreted with caution.

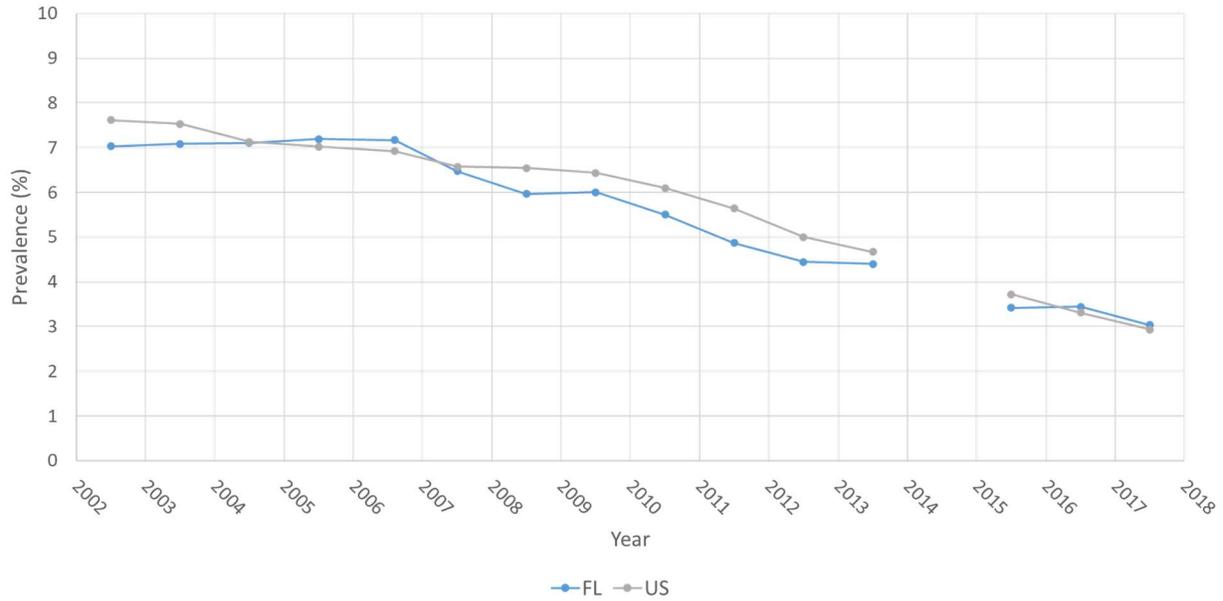


Figure 6. Two-Year Average Past-Year Pain Reliever Misuse among Youth, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

Heroin Use among Adults

Not surprisingly, 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 prevalence among Florida’s adults declined slightly for a couple of years but has returned to about the same rate in 2017- 2018 (0.30%) as it was in 2013-2014 (0.33%). Though the prevalence rate for heroin use in the US was just below that in Florida (0.32% versus 0.33%, respectively) in 2013-2014, the prevalence of heroin use among adults in Florida has been consistently lower than that of the nation since that time.

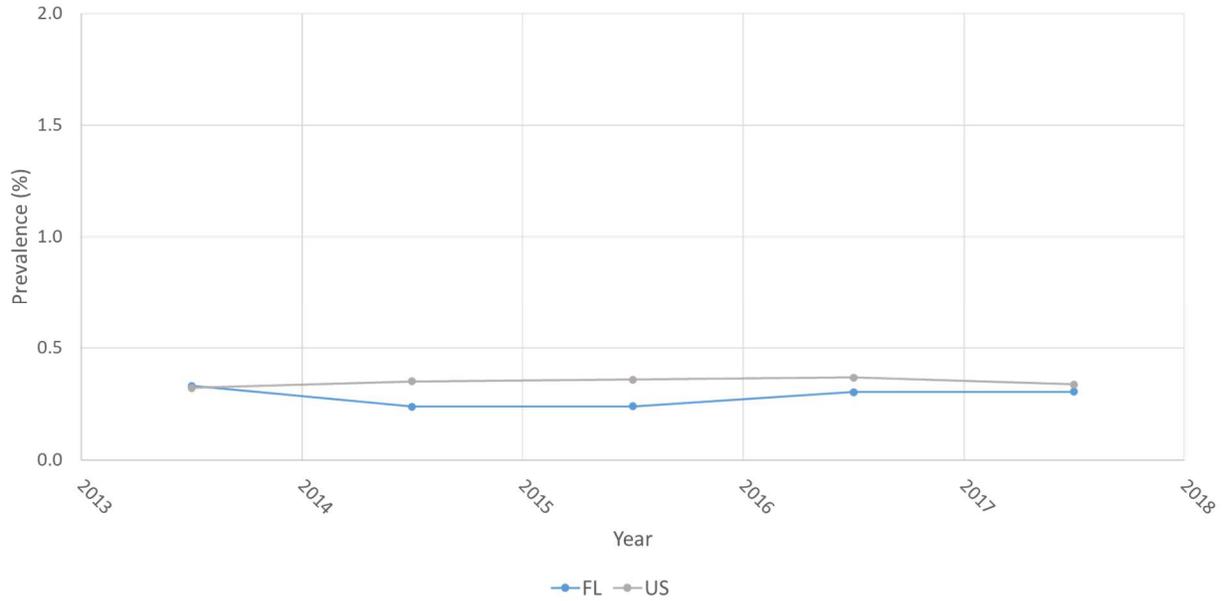


Figure 7. Two-Year Average Past-year Heroin Use among Adults, United States and Florida, 2013 – 2018. Source: [NSDUH](#).

For the period 2016 – 2018 the prevalence of heroin use differed by 0.22 percentage points among the Managing Entity Regions (MERs), with the highest prevalence of 0.48% being observed in the region served by Big Bend Community Based Care (BBCBC) dba NWF Health, and the lowest prevalence of 0.26% being observed in the counties that are served by South Florida Behavioral Health Network, Inc. dba Thriving Mind (Figure 8). The rate of use in Florida (0.34%) for the period 2016 – 2018 was higher than the highest rate of use among MERs in the previous period from 2014 – 2016 (0.33% in the MER served by BBCBC dba NW Health), with all MERs showing higher rates than the previous period.

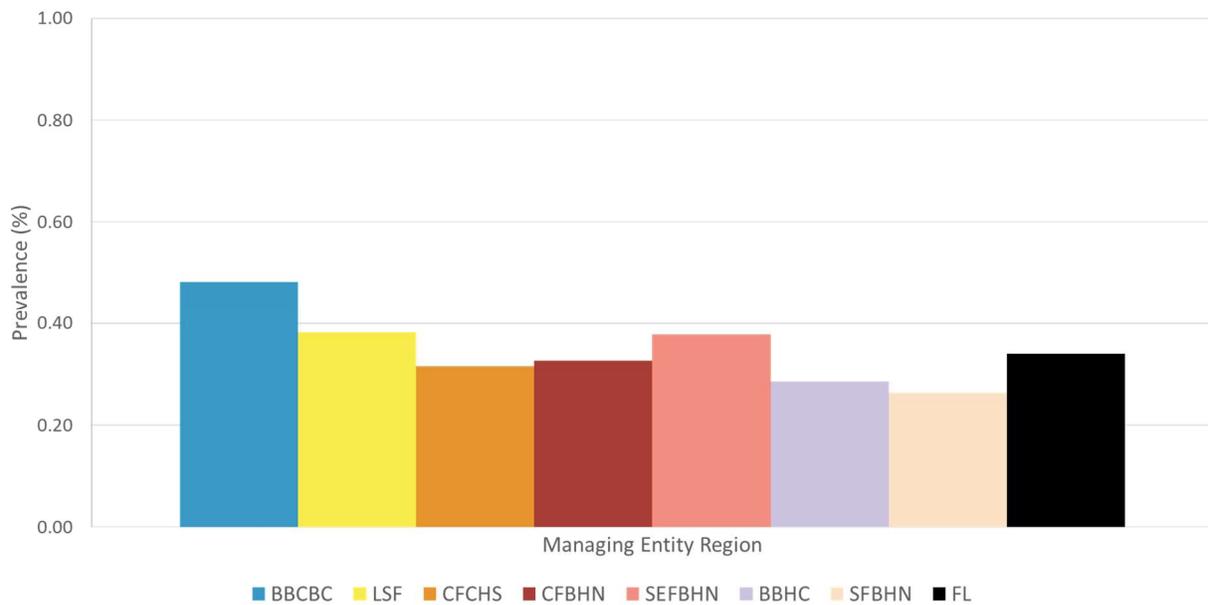


Figure 8. Three-Year Average Past-year Heroin Use among Adults, Florida and Managing Entity Regions, 2016 – 2018. Source: [NSDUH](#).

Heroin Use among Youth

Compared to prescription opioid pain reliever misuse, heroin use among youth in Florida and the US is rarer but has decreased at a slower rate (Figure 6 and Figure 9). After a marked increase in use from 2014-2015 to 2015-2016 among Florida youth (but not the US overall), there has been a steady decline to 0.06% of Florida youth aged 12 – 17 years endorsing use of heroin in the past year, which is similar to the prevalence of past-year heroin use among the nation’s youth.

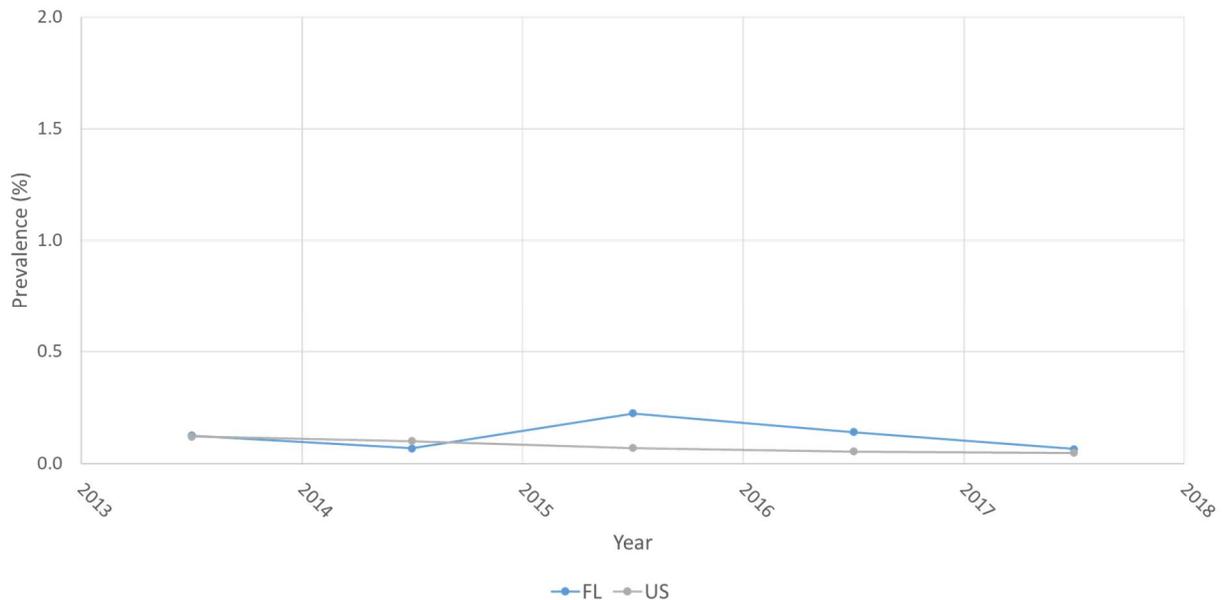


Figure 9. Two-Year Average Past-year Heroin Use among Youth, United States and Florida, 2013 – 2018. Source: [NSDUH](#).

Use of heroin is further characterized for youth over the life course as well as in the past month. As expected, the prevalence of heroin use at any time during the life span is the highest; whereas, the prevalence of past-month use is the lowest (Figure 10). A similar pattern in the prevalence of lifetime use of heroin among youth is observed for Florida and the US as a whole, with rates tending to decline over time since the middle of the 2000s. In addition, the prevalence of lifetime use of heroin among Florida’s youth has been consistently below that of the nation as a whole, until the latest year of reporting when the rates converged at 0.6% among youth in both Florida and the nation overall.

Unlike lifetime use, past-month use of heroin among youth has declined more slowly over time, similar to what was observed for the prevalence of past-year use among youth (Figure 9 and Figure 10). In addition, differences between the prevalence among youth in Florida and the nation as a whole are small to none throughout the period of observation. In 2006, the prevalence of past-month heroin use among youth in the US and Florida was 0.4%, declining to 0.2% in both Florida and the US in 2019.

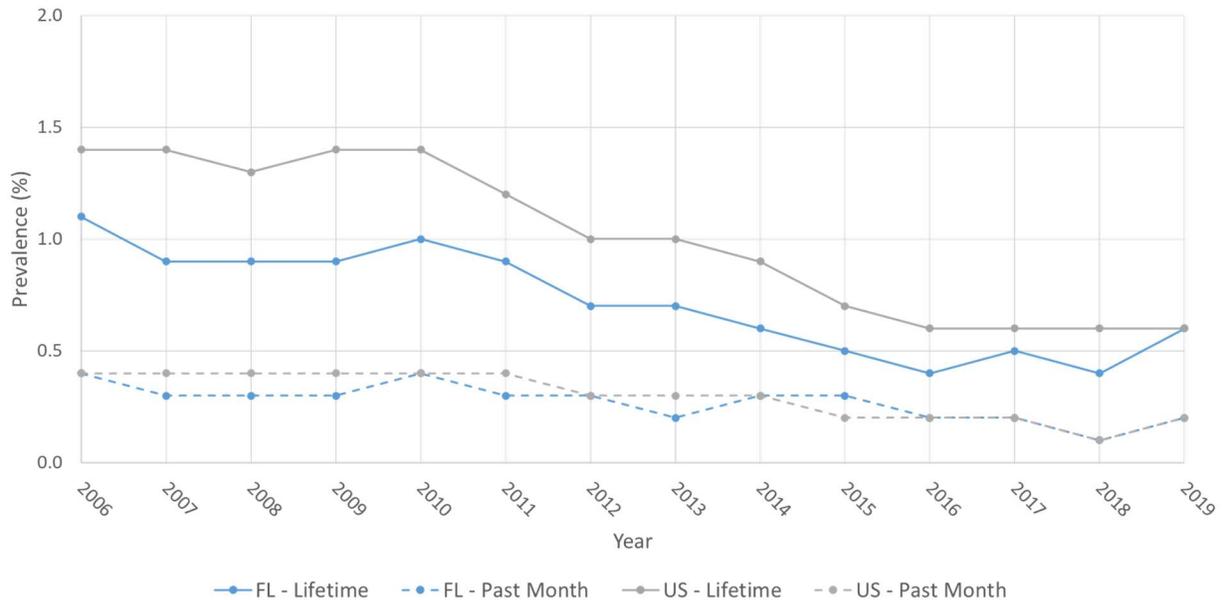


Figure 10. Heroin Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

PSYCHOSTIMULANT USE

Like opioids, stimulants are medications available by prescription for the treatment of certain conditions such as narcolepsy. In spite of their medicinal use, however, stimulants can also be misused. In addition to prescription stimulants, several illicit stimulants are also 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, 2018a).

Methamphetamine is another stimulant, which is 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, 2.1% of adults in Florida endorsed the use of cocaine in the past year, a number similar to that for the nation (2.3%) (Figure 11). Though the overall trend for the period of observation is down, there has been an increase in the prevalence of past-year use of cocaine among adults in both Florida (from 1.7% in 2014-2015) and the US (from 1.8% in 2013-2014) in the most recent years of reporting.

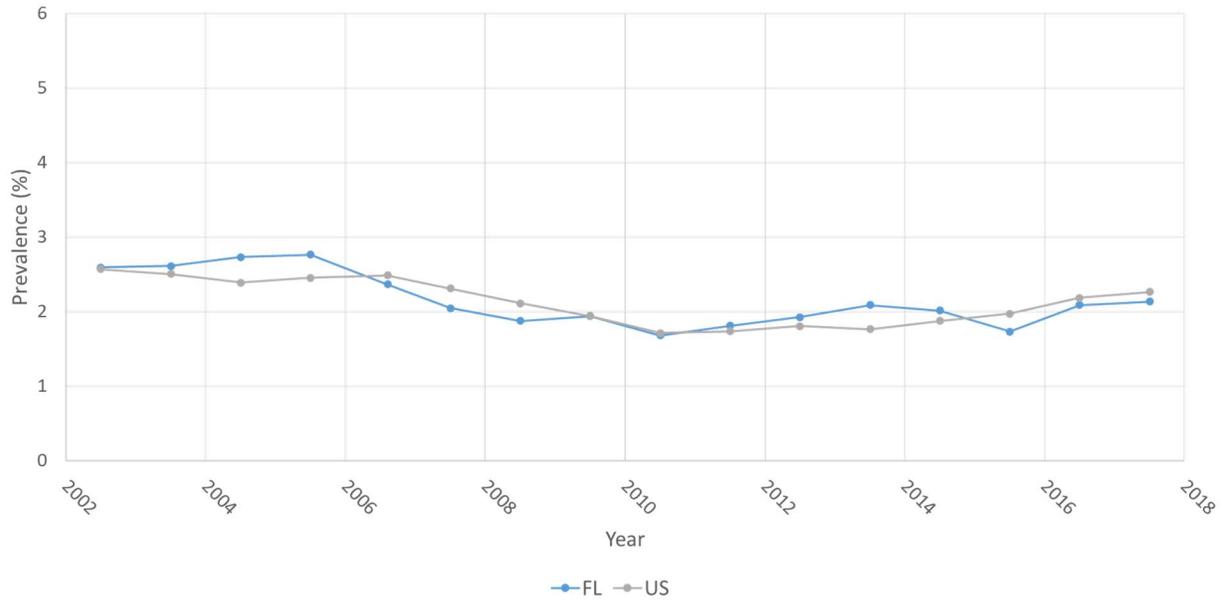


Figure 11. Two-Year Average Past-year Cocaine Use among Adults, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

When broken down by Managing Entity Region, the pattern of past-year use of cocaine among adults is similar across the various MERs (Figure 12). The prevalence of use of cocaine is highest in regions in the northern and central part of the state and lowest in the southern-most region of the state (Figures 13-19).

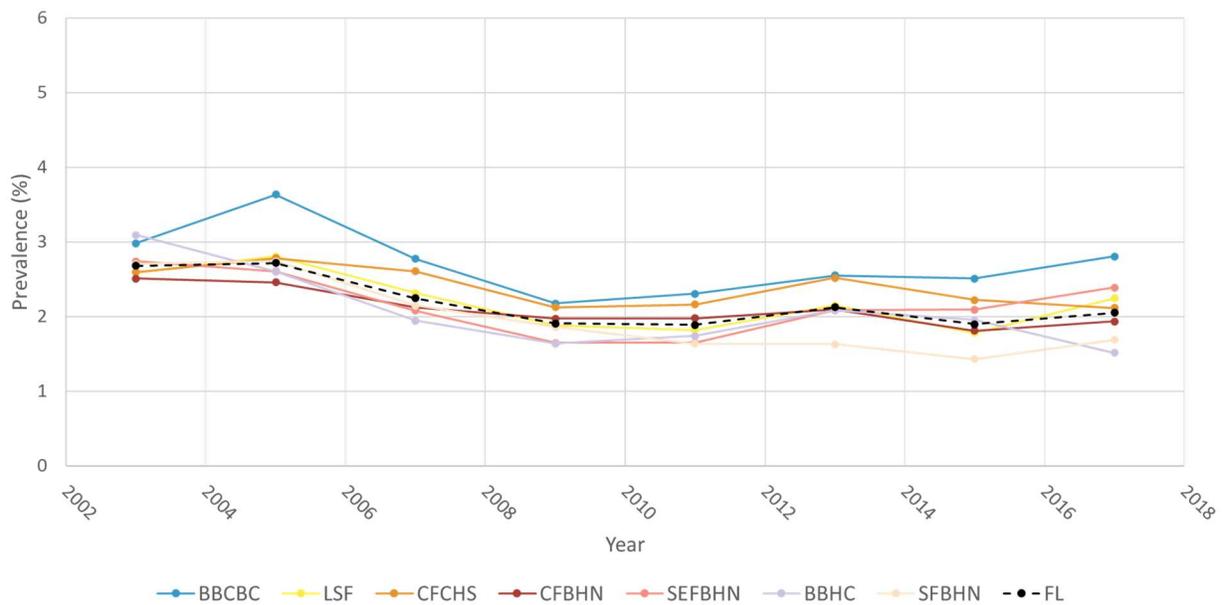


Figure 12. Three-Year Average Past-year Cocaine Use among Adults, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

The highest prevalence rate for past-year use of cocaine among adults is observed in the panhandle, the MER served by Big Bend Community Based Care dba NW Health (Figure 13). Past-year use of cocaine among adults is consistently higher in this region than in the state as a whole, but changes in prevalence over time mirror patterns observed for the state as a whole.

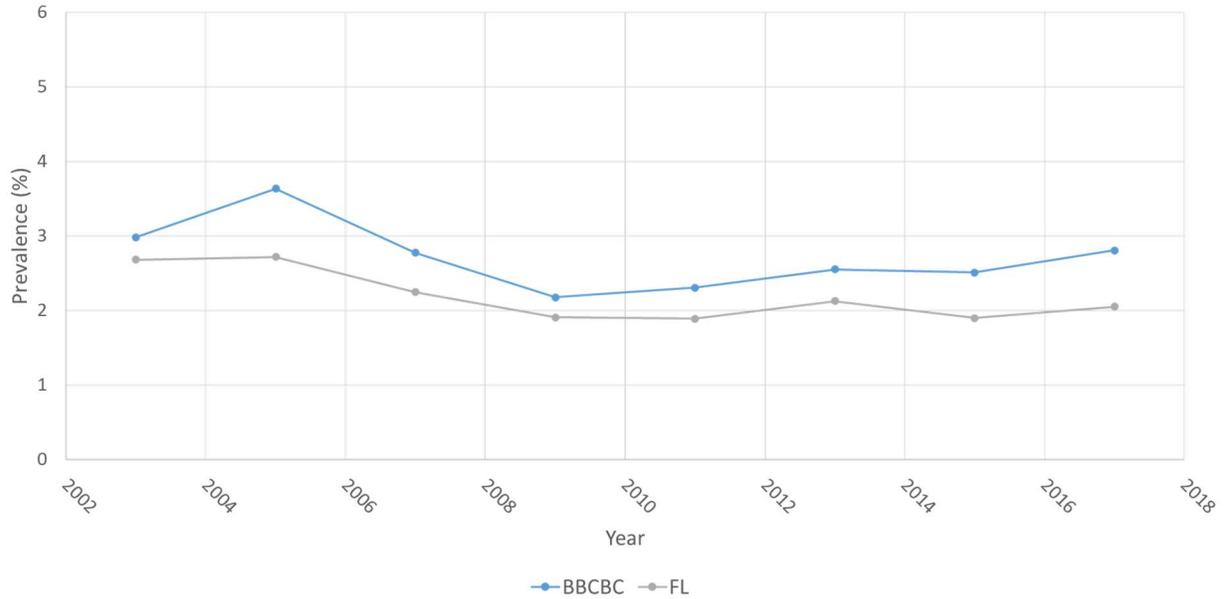


Figure 13. Three-Year Average Past-year Cocaine Use among Adults, Florida and Big Bend Community Based Care, 2002 – 2018. Source: [NSDUH](#).

The other region in which the prevalence of past-year use of cocaine among adults exceeds that of the state as a whole is the MER served by Central Florida Cares Health System, which includes Brevard, Orange, Osceola, and Seminole Counties (Figure 14). After diverging slightly above the state prevalence in 2004-2006, changes in this region have mirrored those of the state as a whole until the latest years of reporting (2016-2018), in which the rate declined to nearly converge with the state rate.

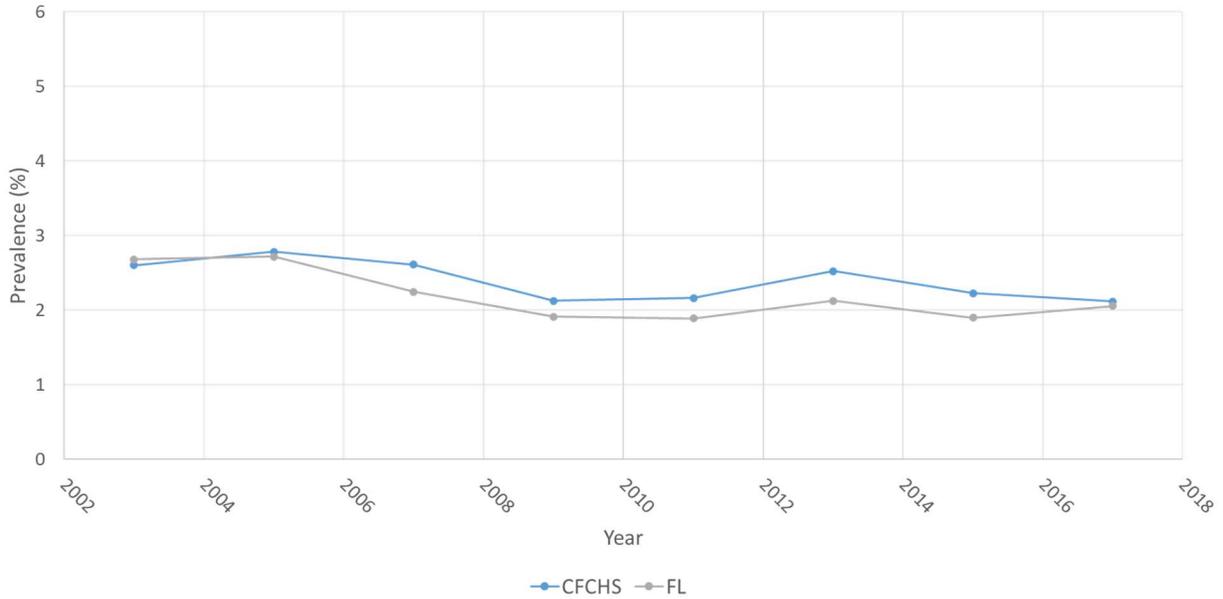


Figure 14. Three-Year Average Past-year Cocaine Use among Adults, Florida and Central Florida Cares Health System, 2002 – 2018. Source: [NSDUH](#).

The prevalence of past-year cocaine use among adults in the four Managing Entity Regions that comprise the majority of the remaining portion of the state has been about the same as the statewide prevalence over the period of observations (Figures 15 – 18). The prevalence of past-year cocaine use in the MER served by Lutheran Services of Florida is nearly the same as Florida throughout the period of observation (Figure 15), with a prevalence rate two tenths of a percentage point above the state in 2016-2018.

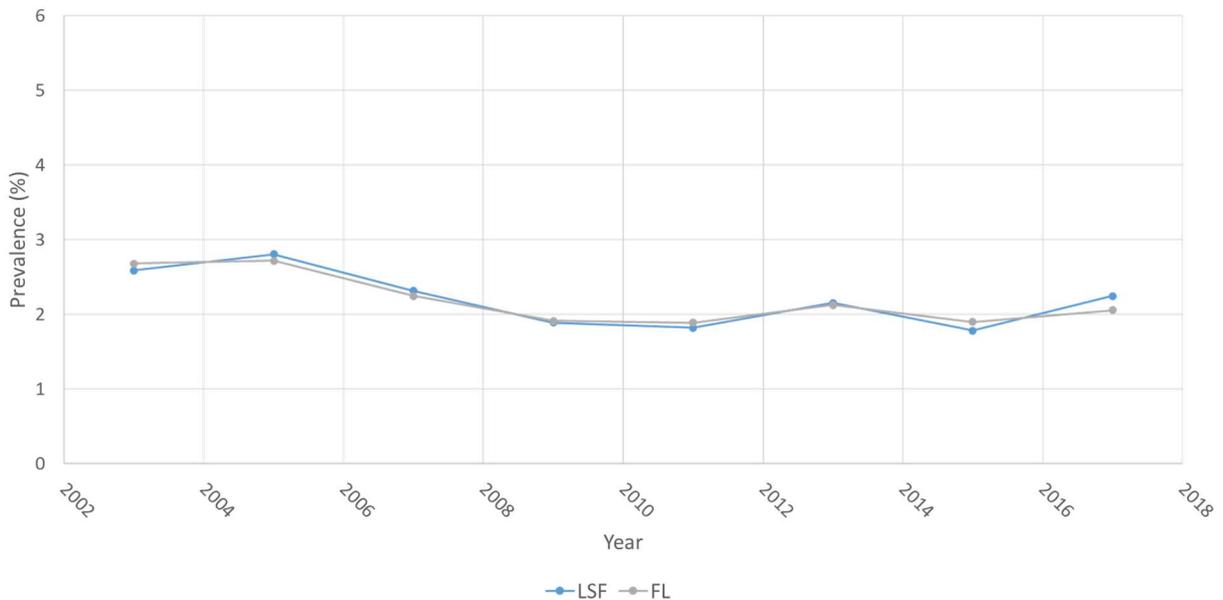


Figure 15. Three-Year Average Past-year Cocaine Use among Adults, Florida and Lutheran Services Florida, 2002 – 2018. Source: [NSDUH](#).

A similar pattern is observed within the MER served by Central Florida Behavioral Health Network, Inc. (Figure 16); after a prevalence rate slightly below the state in the early part of the period of observation, the rates are nearly identical over time, with a rate for these central Florida counties of only a tenth of a percentage point less than that for the state.

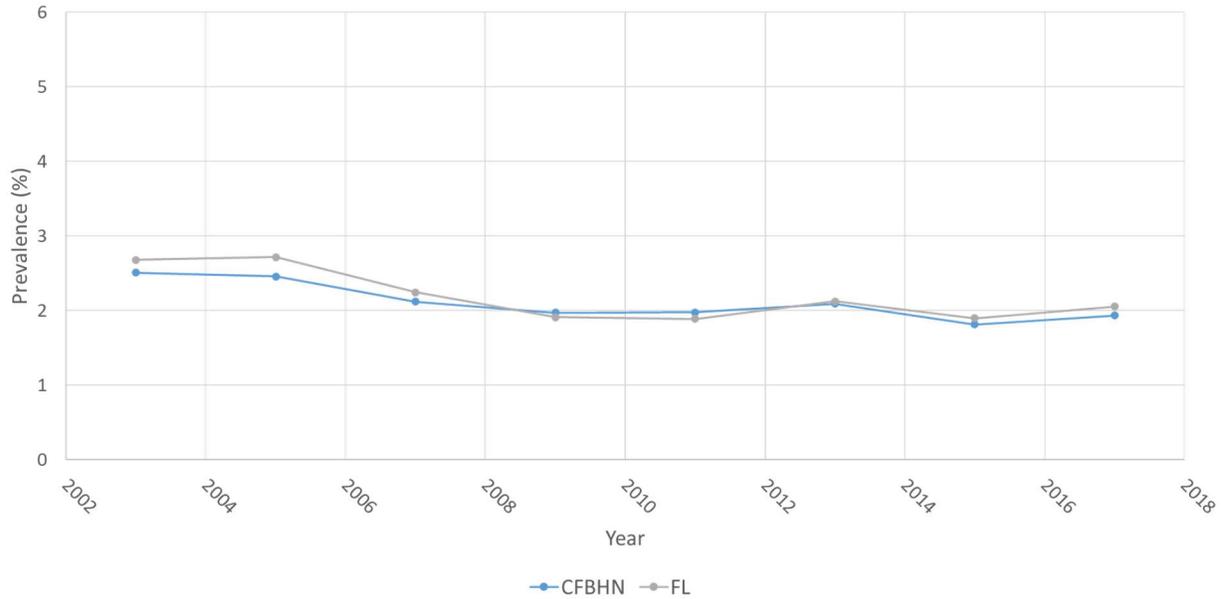


Figure 16. Three-Year Average Past-year Cocaine Use among Adults, Florida and Central Florida Behavioral Health Network, Inc., 2002 – 2018. Source: [NSDUH](#).

In the two MERs in the southeastern part of Florida, a similar pattern is observed until 2014-2016 (Figure 17 and Figure 18). After dipping below the overall state prevalence for most of the period of observation, both regions had prevalence rates that diverged from the state rate in 2016-2018. The prevalence of past-year cocaine use among adults in the MER served by the Southeast Florida Behavioral Health Network exceeded the state rate by more than three tenths of a percentage point (Figure 17).

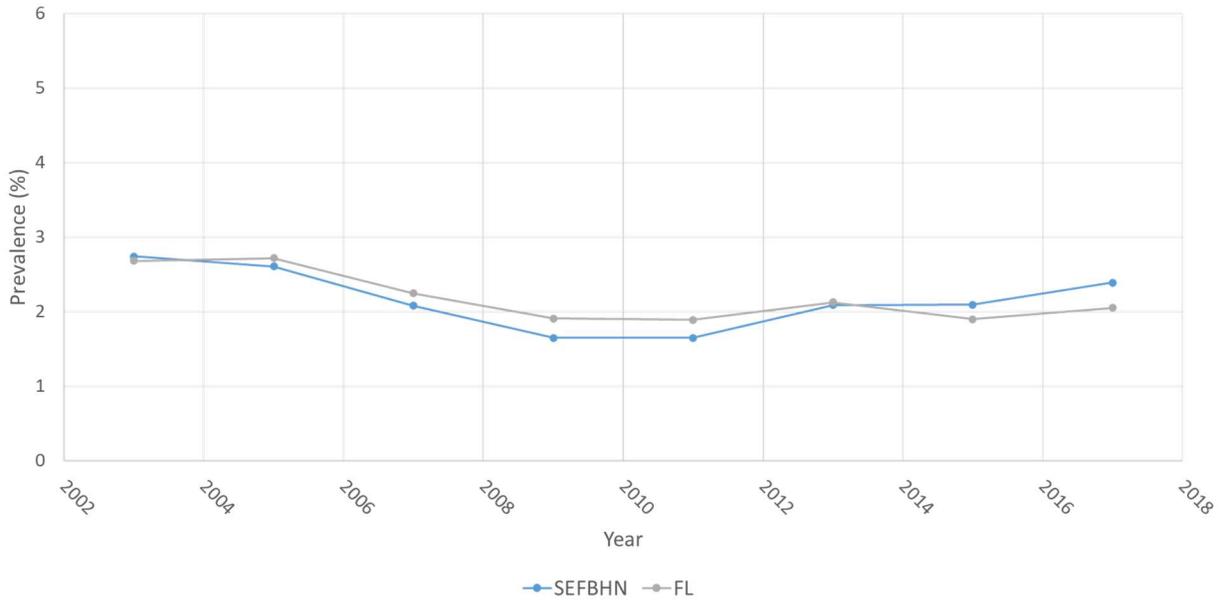


Figure 17. Three-Year Average Past-year Cocaine Use among Adults, Florida and Southeast Florida Behavioral Health Network, 2002 – 2018. Source: [NSDUH](#).

Meanwhile, Broward County saw a prevalence rate of past-year cocaine use among adults dip five tenths of a percentage point below the state rate (Figure 18).

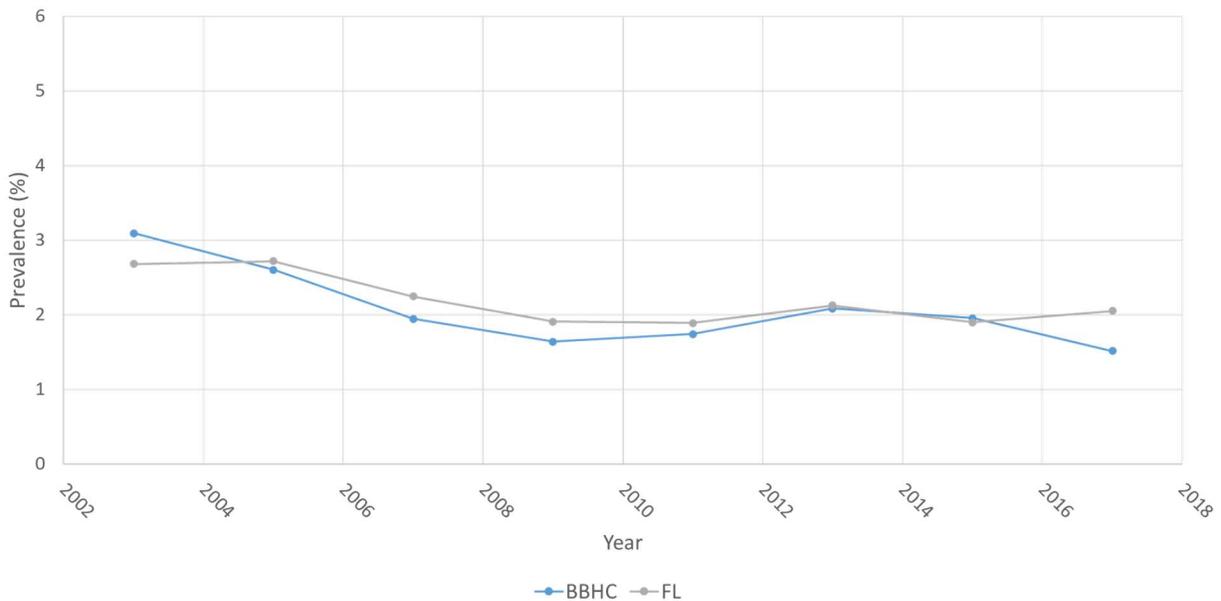


Figure 18. Three-Year Average Past-year Cocaine Use among Adults, Florida and Broward Behavioral Health Coalition, 2002 – 2018. Source: [NSDUH](#).

The MER in which the prevalence of past-year cocaine use declined below the state rate and then declined faster than the state through 2014-2016 is served by the South Florida Behavioral Health

Network, Inc. (SFBHN) dba Thriving Mind (Figure 19). Though the latest rate is below the state overall, the rate in the MER served by SFBHN increased recently.

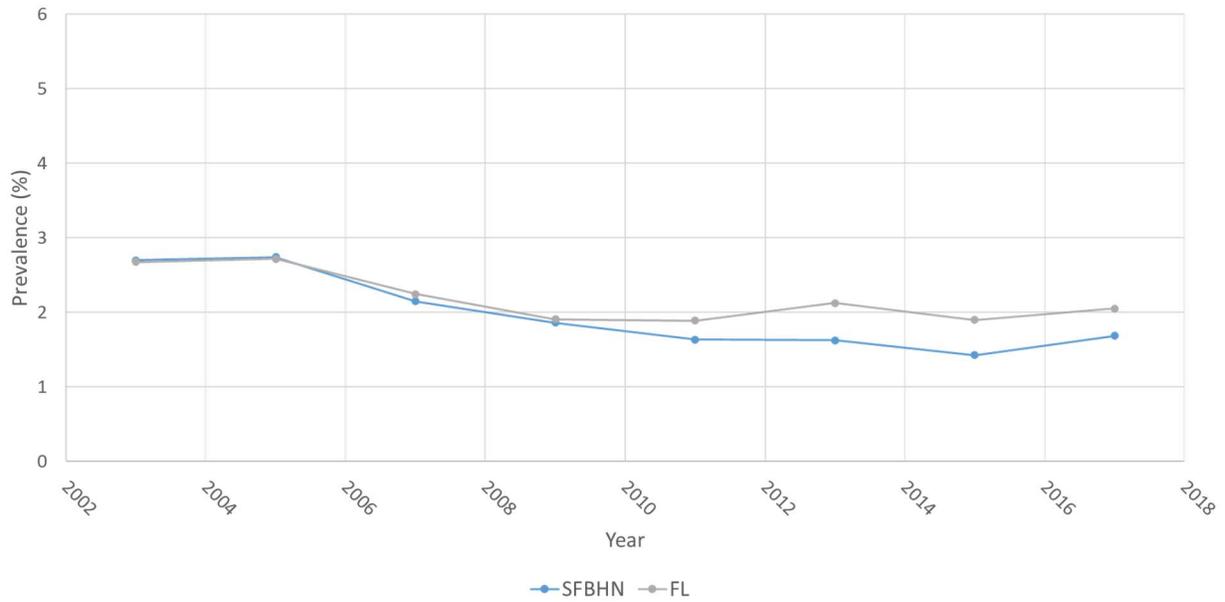


Figure 19. Three-Year Average Past-year Cocaine Use among Adults, Florida and South Florida Behavioral Health Network, Inc., 2002 – 2018. Source: [NSDUH](#).

Cocaine Use among Youth

The prevalence of past-year cocaine use among Florida’s youth was lower than among adults in 2002-2003 (1.9% versus 2.6%, respectively) and declined more steadily to 0.5% in 2017-2018 (Figure 11 and Figure 20). The decline in past-year cocaine use among youth in Florida has mirrored the same decline in the country overall, though the prevalence in Florida increased just slightly in 2017-2018 compared to 2016-2017 (0.48% versus 0.45%) (Figure 20).

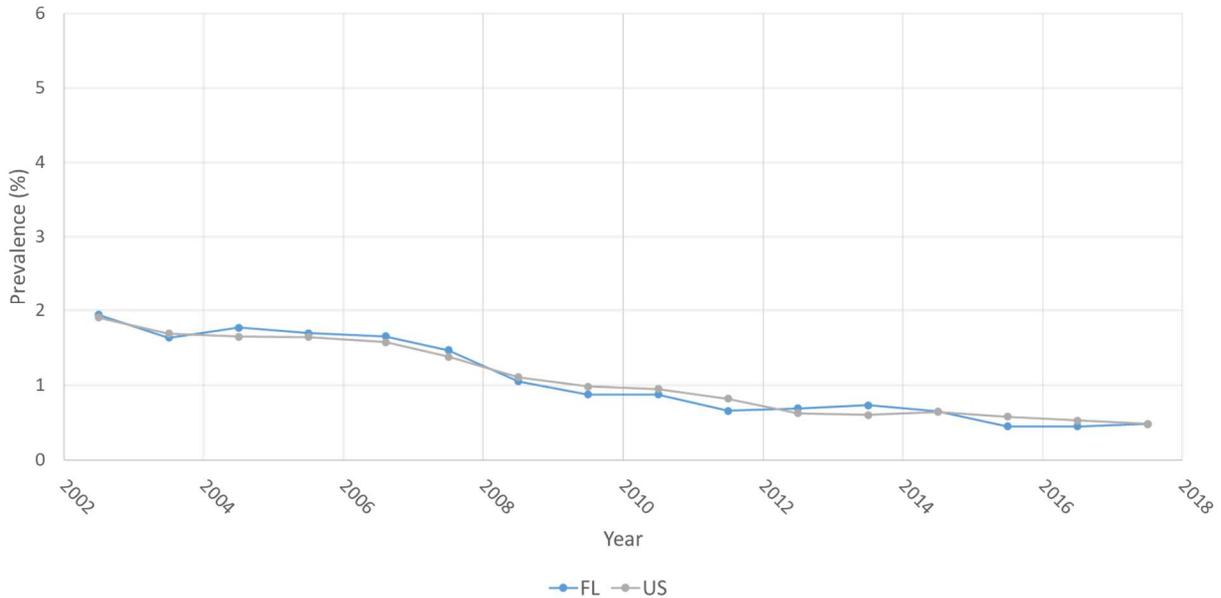


Figure 20. Two-Year Average Past-year Cocaine Use among Youth, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

Though there was some minor variability in past-year use of cocaine among Florida youth by MERs early in the period of observation, all of the MER-specific prevalence rates have converged tightly around the state rate over time with only a 0.2 percentage-point difference between the MERs with the highest and lowest rates, namely the MERs served by the Central Florida Behavioral Health Network, Inc. and the Broward Behavioral Health Coalition, respectively (Figure 21).

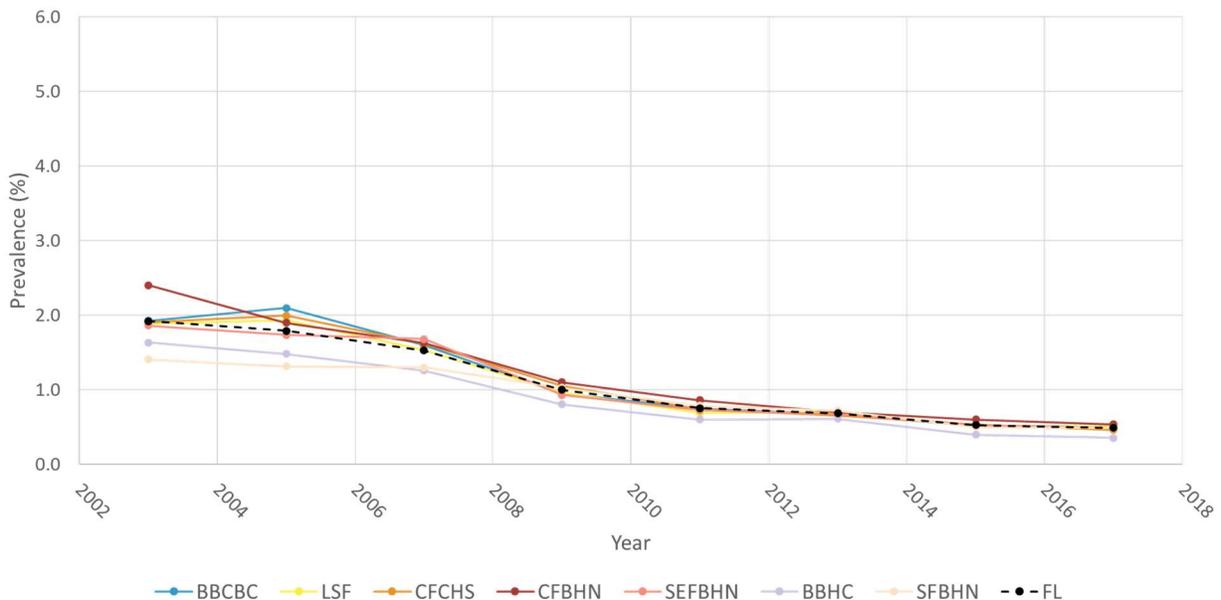


Figure 21. Three-Year Average Past-year Cocaine Use among Youth, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

Similar declines in cocaine use were observed among Florida’s youth for both lifetime and past-month use as well, with reductions of 50% or more in the prevalence rates from the beginning to the end of the period of observation (Figure 22). The prevalence of lifetime use of cocaine among Florida’s youth was consistently below the national rate, though the prevalence of past-month use was more comparable during the period for which data were available for Florida.

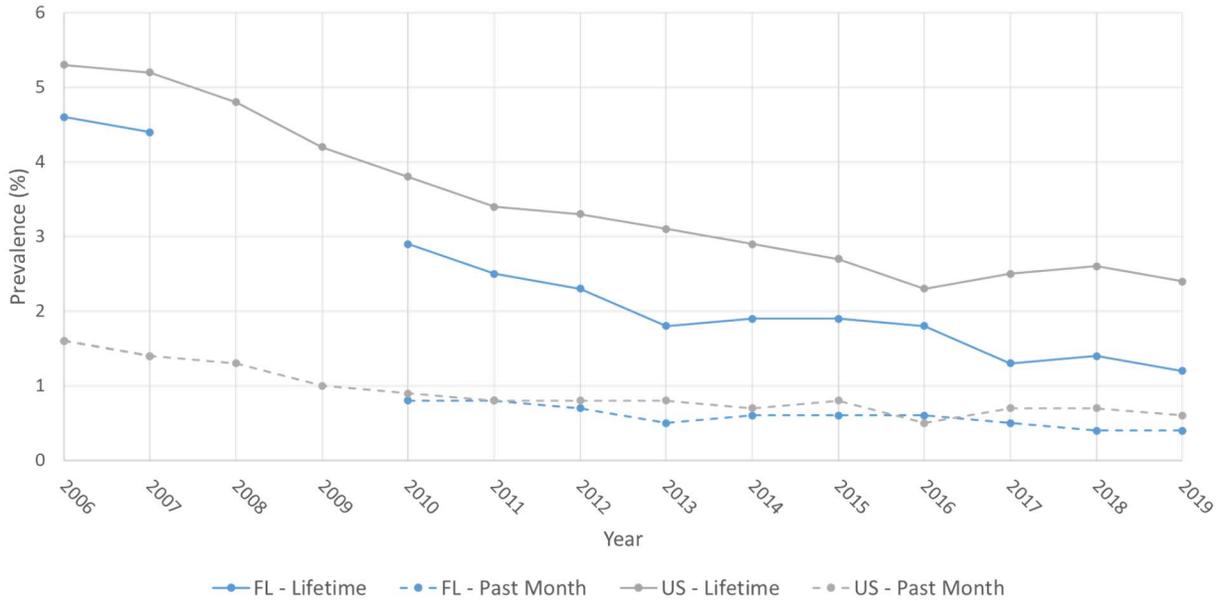


Figure 22. Cocaine Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

There was more variability in lifetime use of cocaine among youth between the MERs in Florida, especially in the early 2010s (Figure 23).

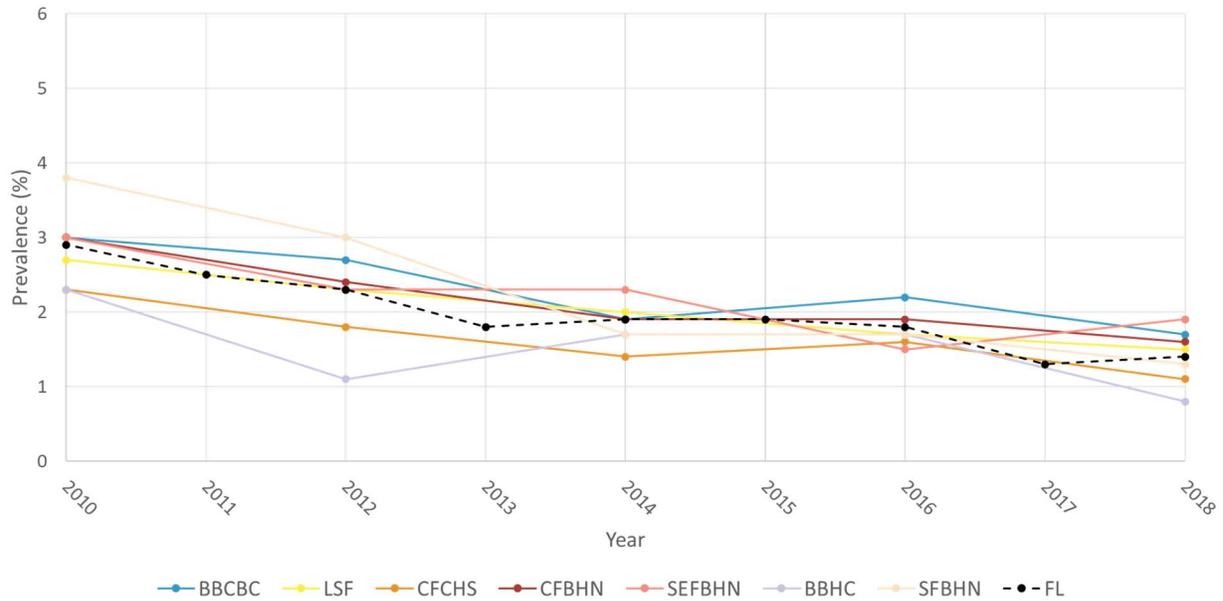


Figure 23. Lifetime Cocaine Use among Youth, Florida and Managing Entity Regions, 2010 – 2018. Source: [FYSAS](#).

Several MERs had prevalence rates of lifetime use of cocaine among youth that rose above and declined below the state rate over the last decade, ending with a prevalence rate in 2018 above that of Florida, including the Managing Entity Regions served by the Southeast Florida Behavioral Health Network, Big Bend Community Based Care dba NWF Health, Central Florida Behavioral Health Network, Inc., and Lutheran Services Florida (Figures 24 – 27).

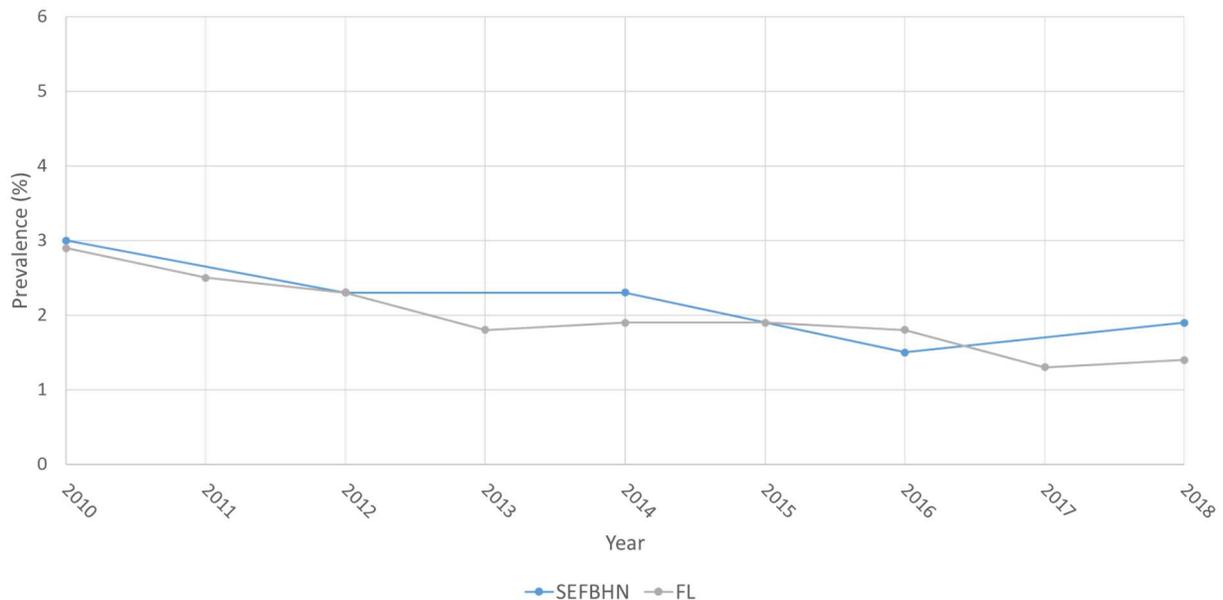


Figure 24. Lifetime Cocaine Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2010 – 2018. Source: [FYSAS](#).

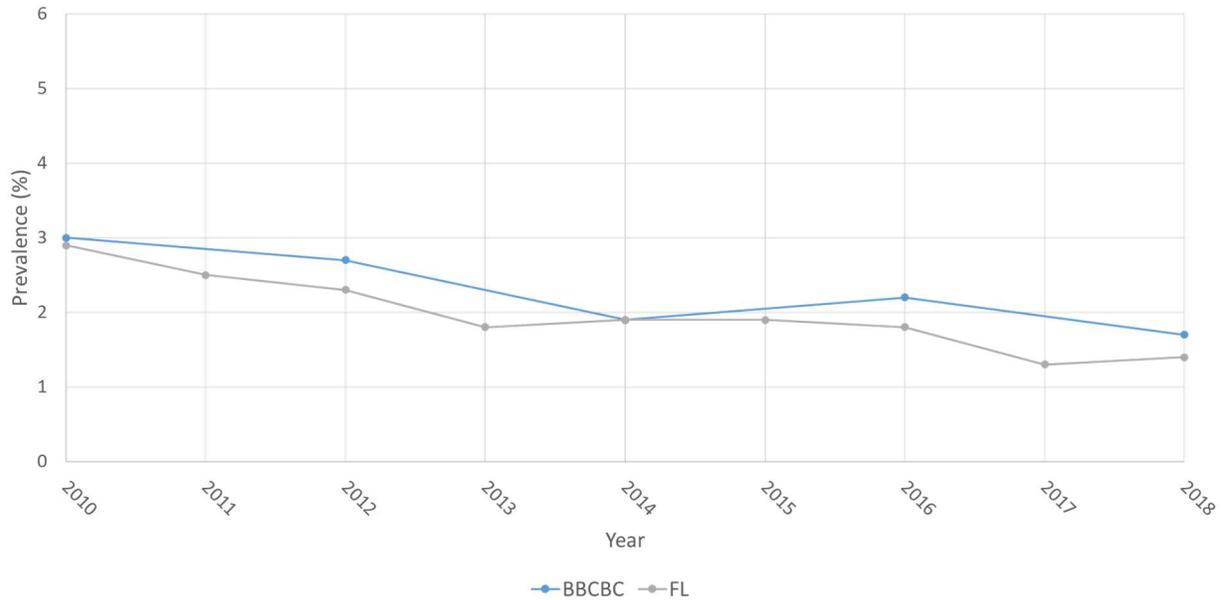


Figure 25. Lifetime Cocaine Use among Youth, Florida and Big Bend Community Based Care dba NWF Health, 2010 – 2018. Source: [FYSAS](#).

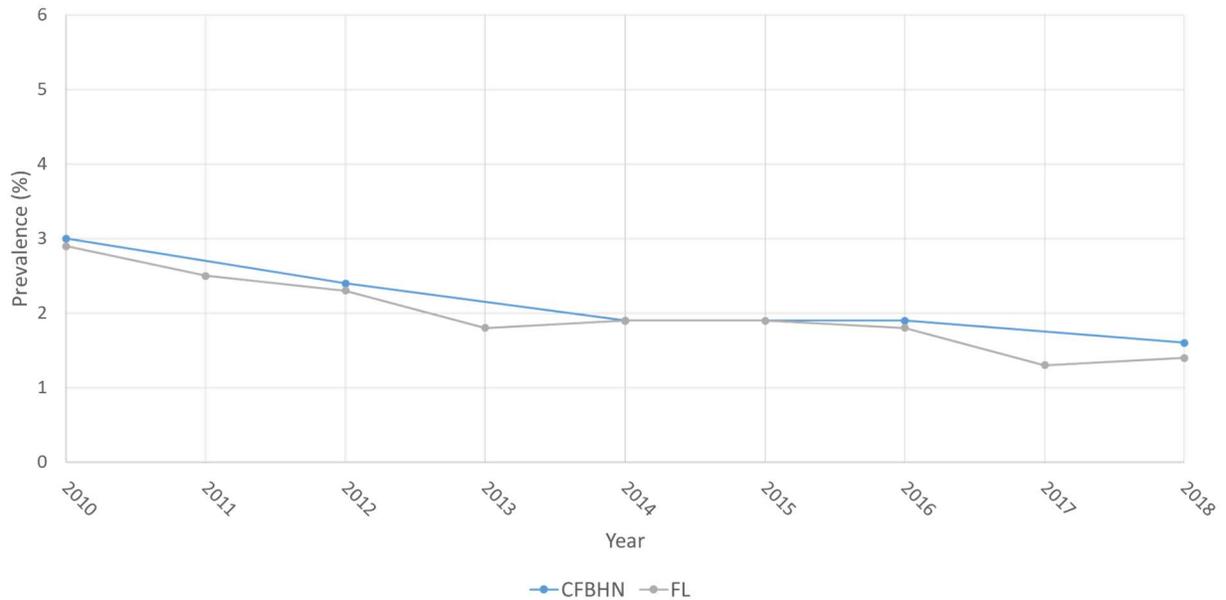


Figure 26. Lifetime Cocaine Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2010 – 2018. Source: [FYSAS](#).

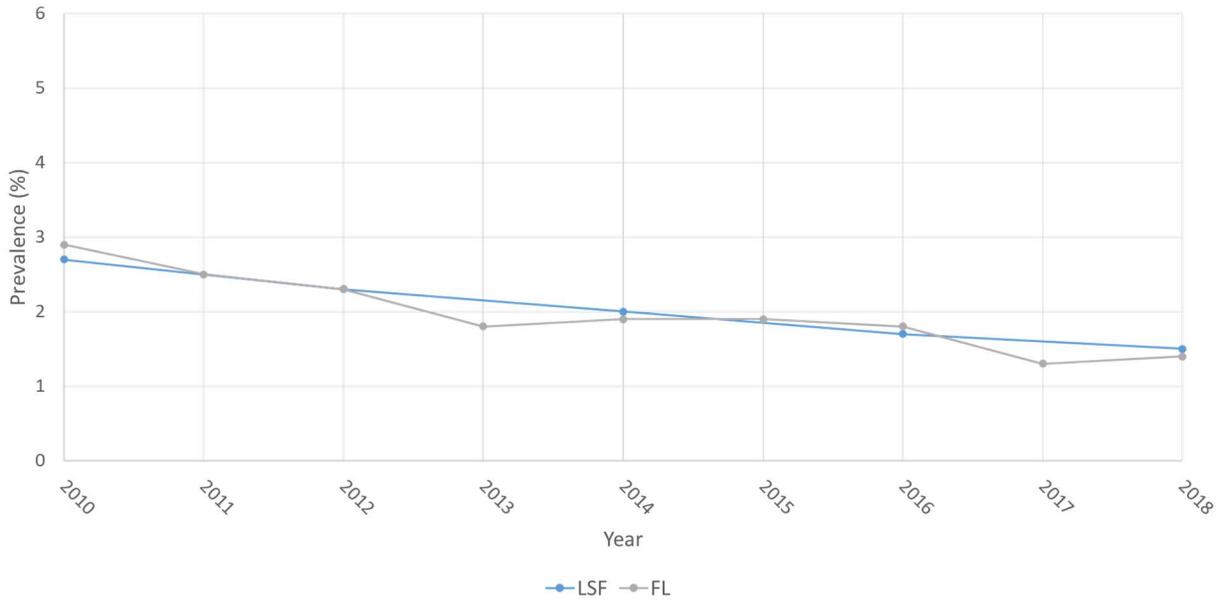


Figure 27. Lifetime Cocaine Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018. Source: [FYSAS](#).

In two other MERs, the ones served by South Florida Behavioral Health Network, Inc. dba Thriving Mind and Central Florida Cares Health System, the MER-specific prevalence rate of lifetime use of cocaine among each region’s youth has declined below and rose above the prevalence rate for the state as a whole, but both ended in 2018 below the overall rate for the state (Figure 28 and Figure 29).

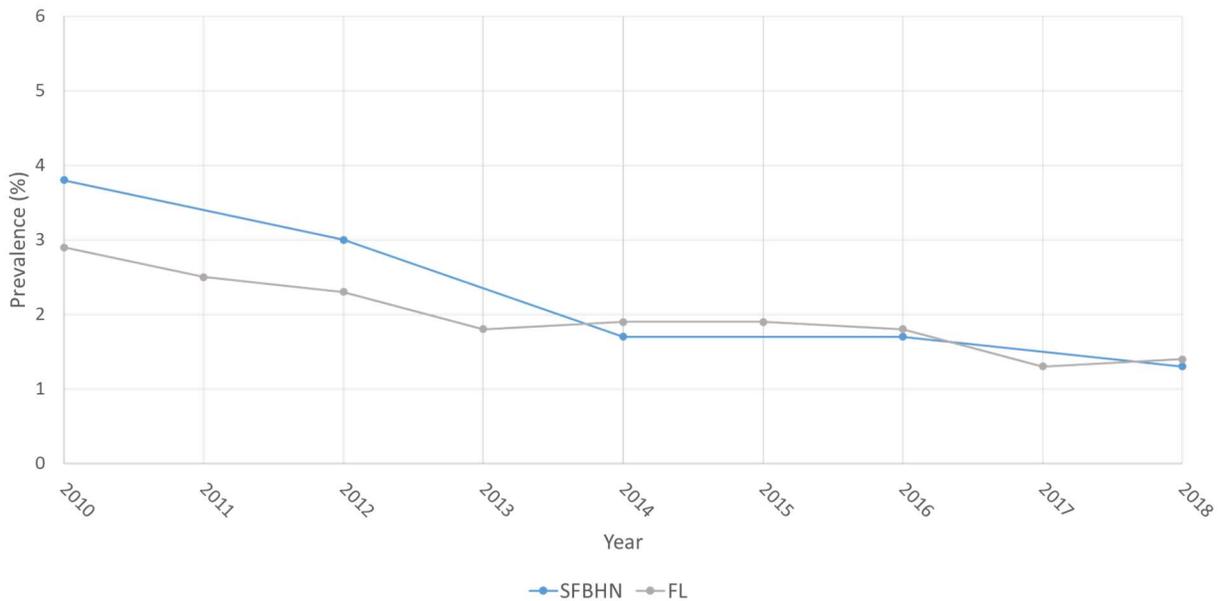


Figure 28. Lifetime Cocaine Use among Youth, Florida and South Florida Behavioral Health Network, Inc., dba Thriving Mind 2010 – 2018. Source: [FYSAS](#).

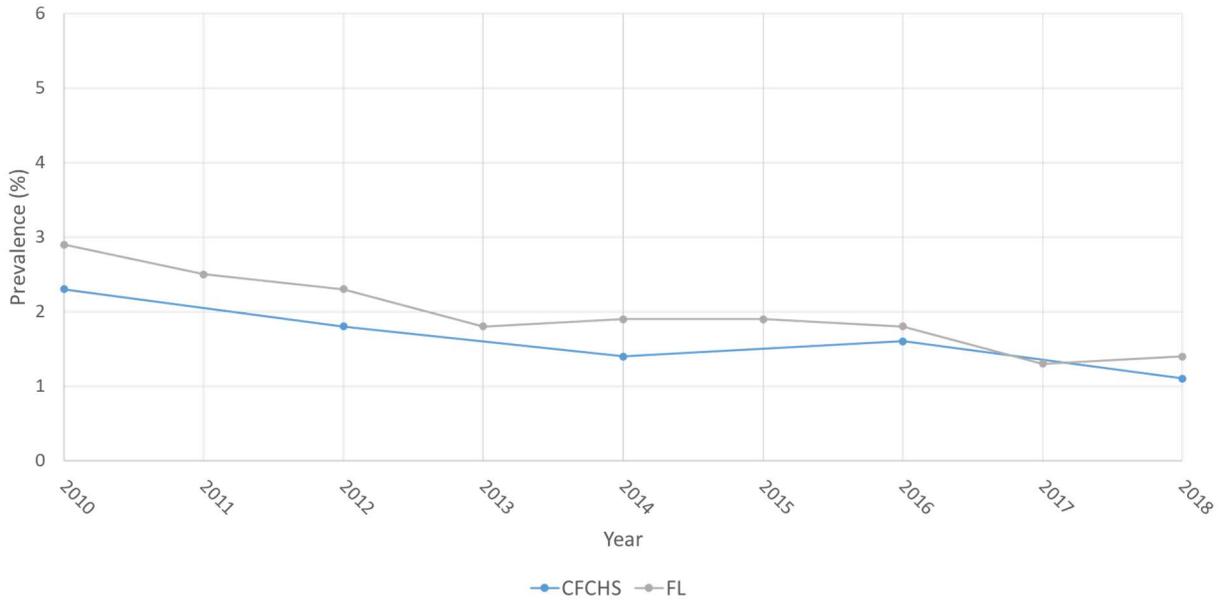


Figure 29. Lifetime Cocaine Use Among Youth, Florida and Central Florida Cares Health System, 2010 – 2018. Source: [FYSAS](#).

In only one region was the prevalence of lifetime cocaine use among youth consistently lower than the overall state rate throughout the period of observation: Broward County (Figure 30).

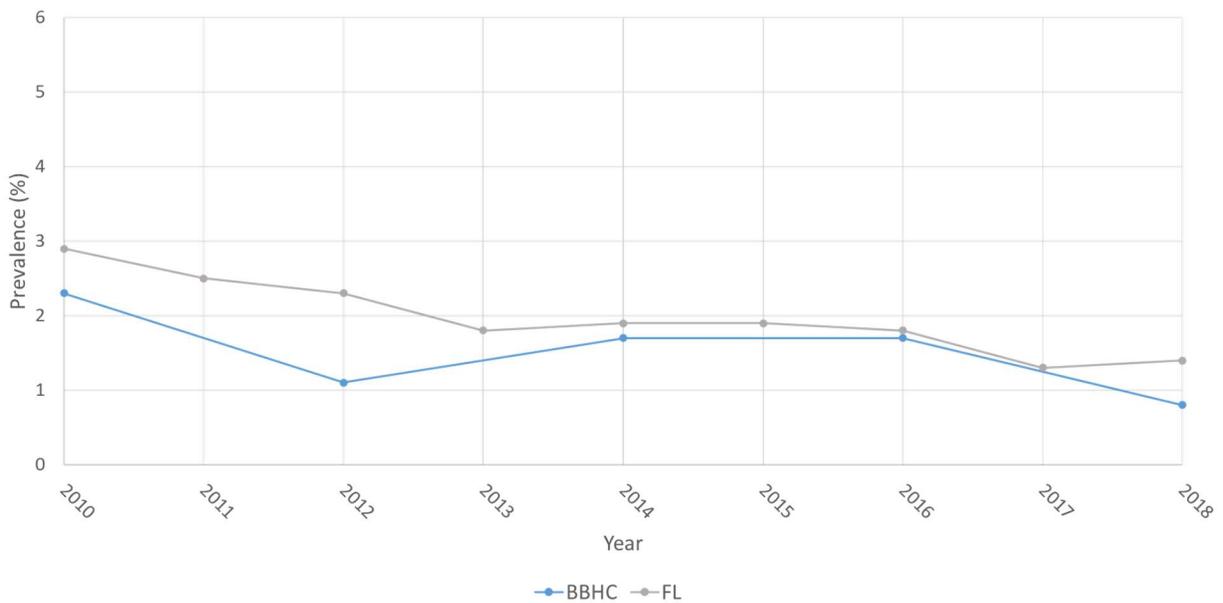


Figure 30. Lifetime Cocaine Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018. Source: [FYSAS](#).

Unlike lifetime cocaine use among youth, past-month cocaine use among youth did not vary nearly as much by MER (Figure 31).

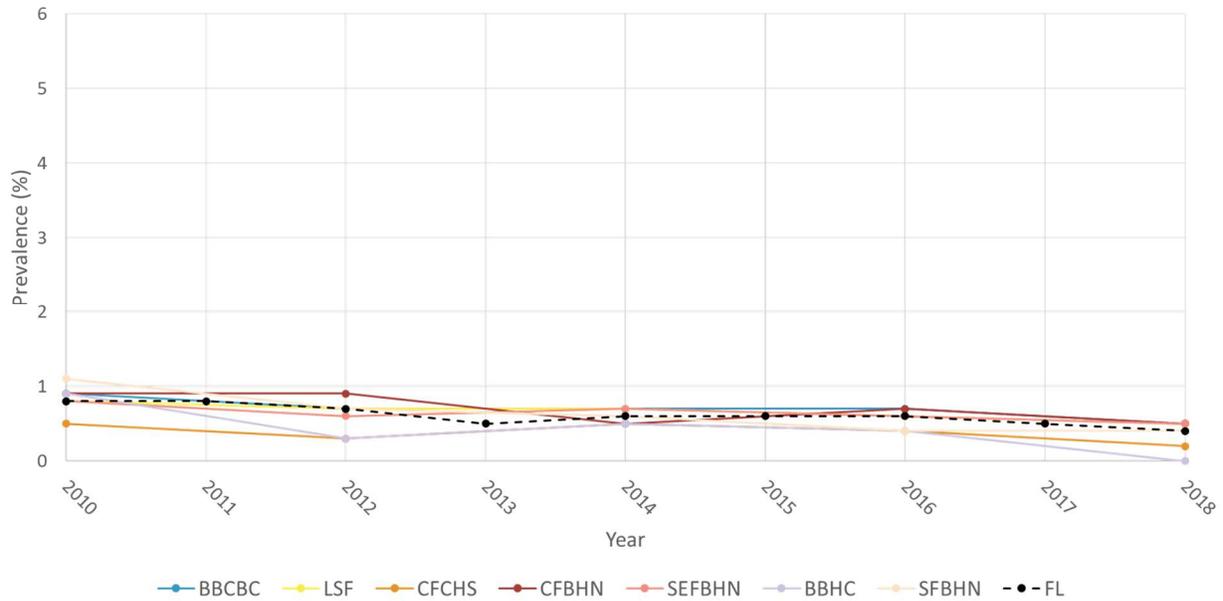


Figure 31. Past Month Cocaine Use among Youth, Florida and Managing Entity Regions, 2010 – 2018. Source: [FYSAS](#).

Methamphetamine Use among Adults

Though there was a slight decline (1 per 1,000 adults) in the prevalence of methamphetamine use in the past year among adults in Florida from 2016-2017 to 2017-2018, the prevalence of methamphetamine has been increasing over the course of the current decade (Figure 32). Note that the way in which the National Survey on Drug Use and Health surveyed respondents about methamphetamine use was revamped in 2014; thus, the break in data for 2013-2014 and 2014-2015. Thus, these data need to be interpreted with caution due to the change in methodology. However, all of the available data are presented for historical context.

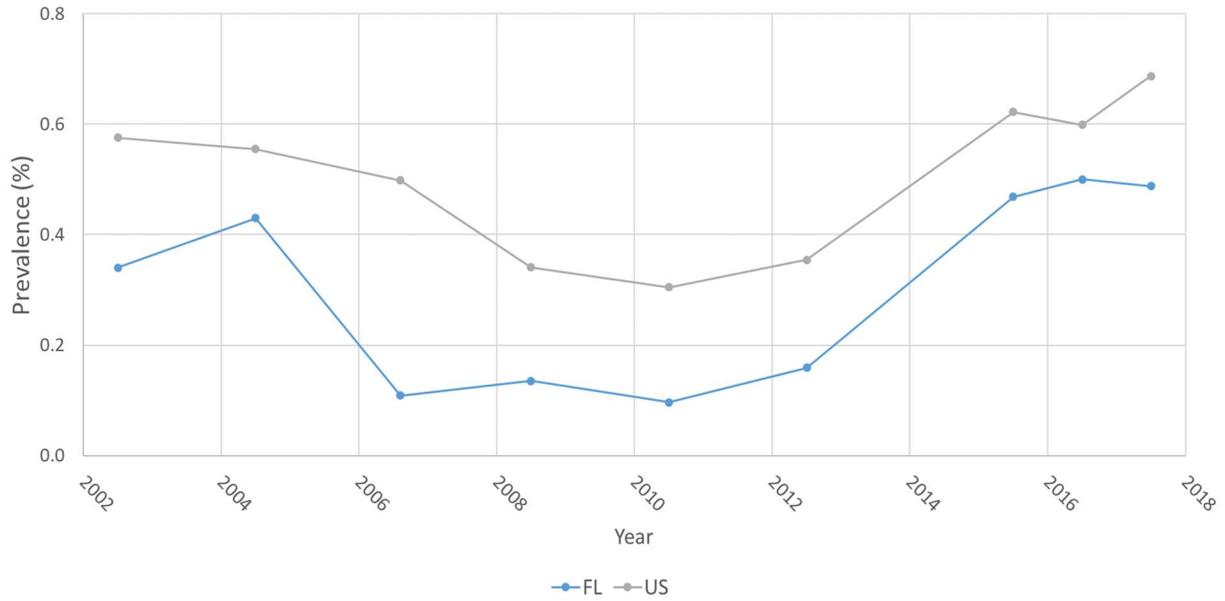


Figure 32. Two-Year Average Past-year Methamphetamine Use among Adults, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

Methamphetamine Use among Youth

Among youth, a different trend has been observed for use of methamphetamine. Prior to the change in the way that these data were collected (same change in methodology as noted in the previous section), there was a decline in the prevalence of past-year methamphetamine use among youth in both Florida and the US overall. Since then, however, the prevalence in the US has begun to increase and the prevalence in Florida has stayed about the same (Figure 33). This is similar to the pattern that occurred among adults for the same time period (Figure 32 and Figure 33).

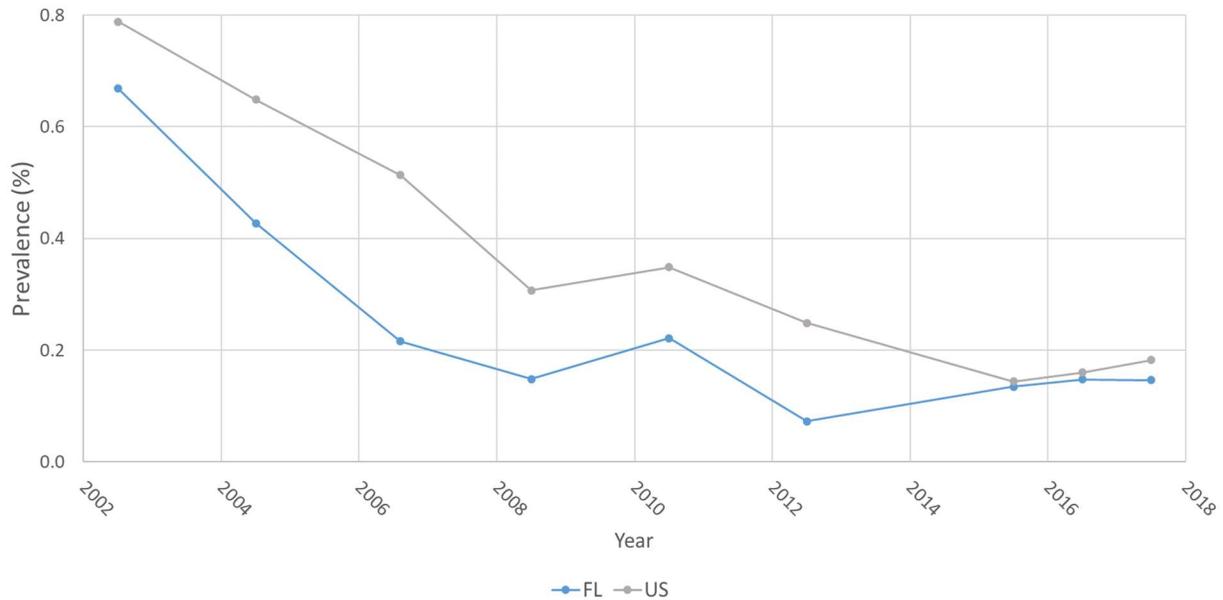


Figure 33. Two-Year Average Past-year Methamphetamine Use among Youth, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

The pattern observed among youth for lifetime use of methamphetamine is similar to that observed for past-year use (Figure 33 and Figure 34): the prevalence among Florida youth is less than that among youth for the nation as a whole. In addition, the prevalence – for both lifetime and past-year use – has declined over time in both the US and Florida, with a faster decline observed in the nation as a whole causing the national and state-specific prevalence rates to become closer over time. In the latest year of data (2019), an increase in the prevalence of lifetime use of methamphetamine was observed for the US but not for Florida, which saw a continued decline. With regard to past-month use, however, the prevalence of methamphetamine use among youth in Florida increased above the national rate in 2016. The prevalence in Florida among youth was twice that of the US in 2018 and 2019 (0.4% versus 0.2%) (Figure 34).

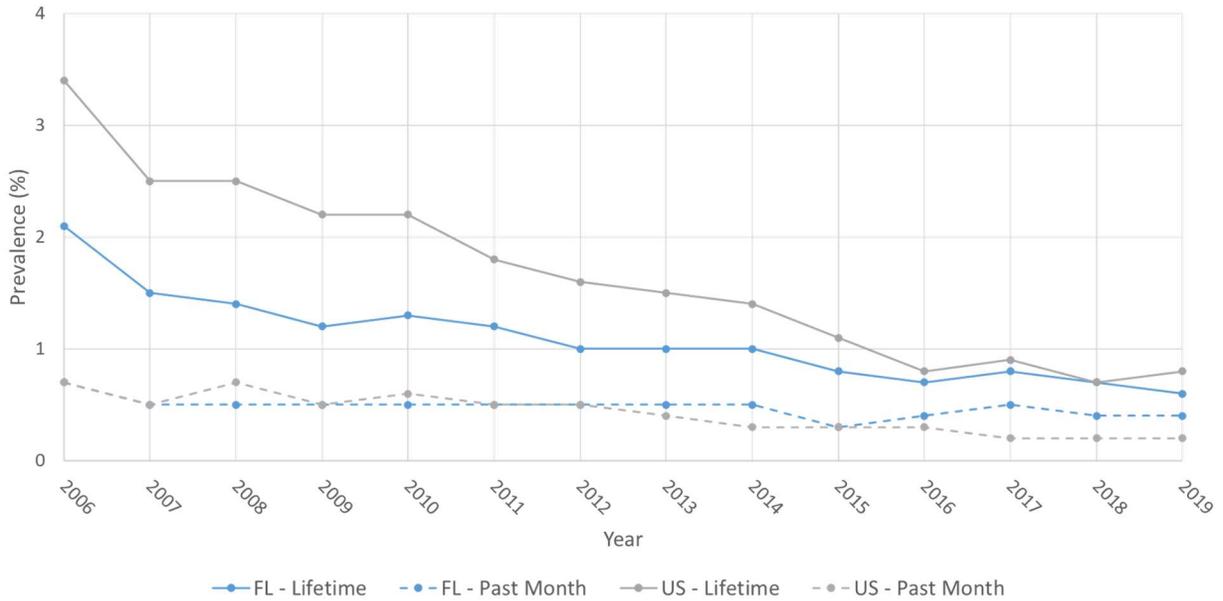


Figure 34. Methamphetamine Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

When examining lifetime and past-month use of methamphetamine among youth by MER, there are differences between the regions (Figure 35 and Figure 36).

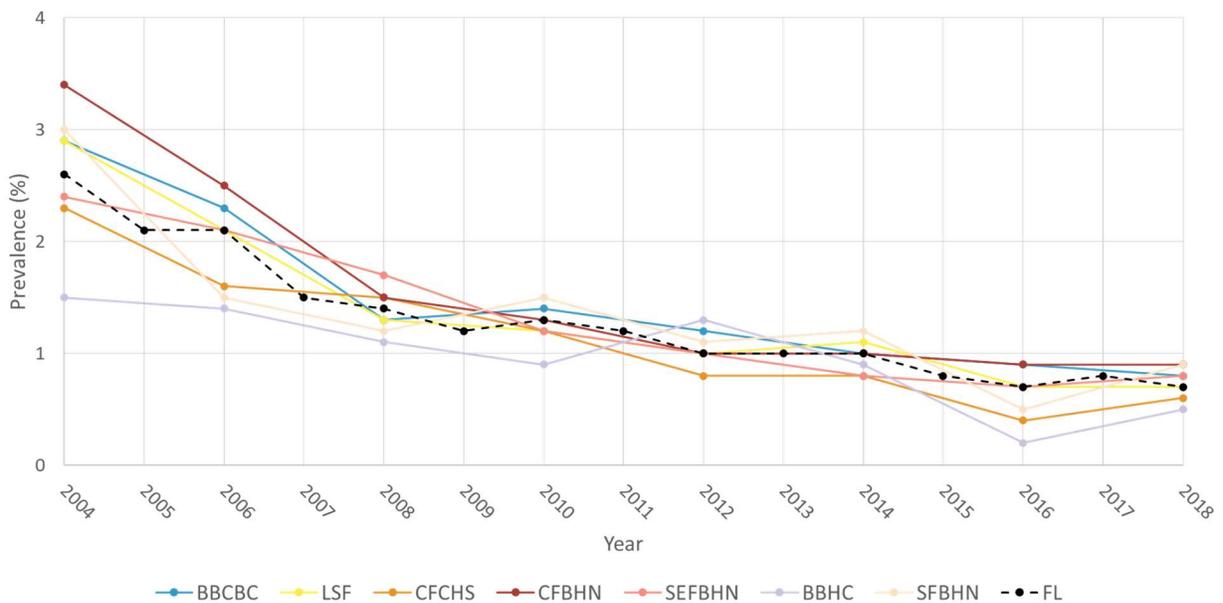


Figure 35. Lifetime Methamphetamine Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

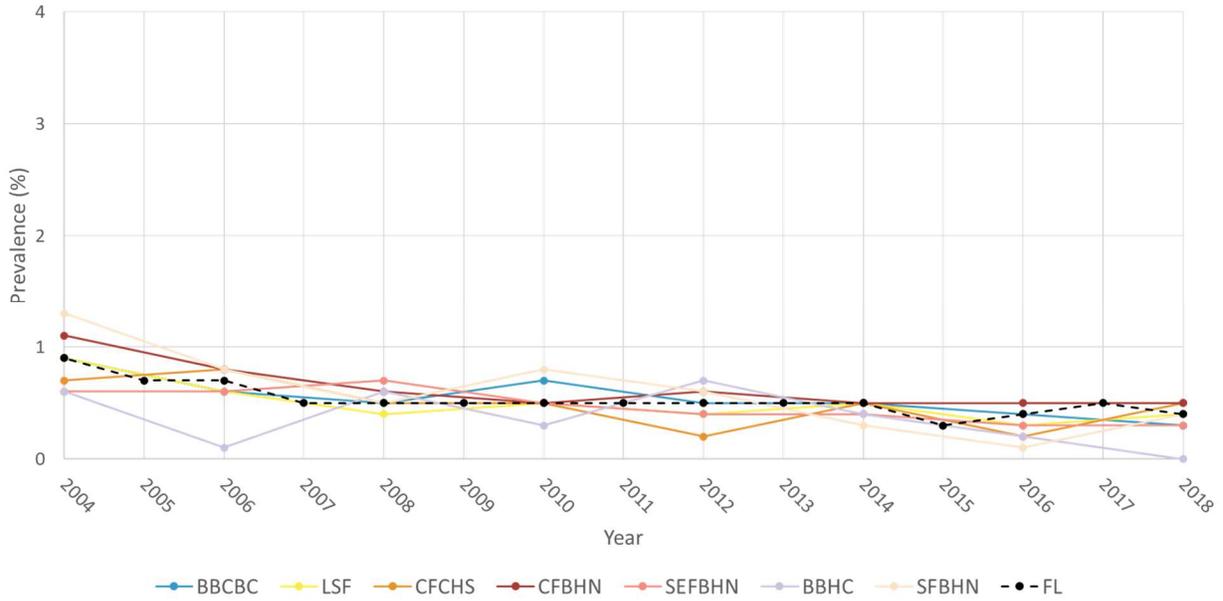


Figure 36. Past Month Methamphetamine Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

With one exception, a clear pattern within the MER-specific prevalence estimates for lifetime and past-month methamphetamine among youth was not identified. The trend over time in each MER is similar to that for Florida as a whole, but with more volatility in the estimates, likely due to smaller populations and the rarity of methamphetamine use (Figures 37 – 42).

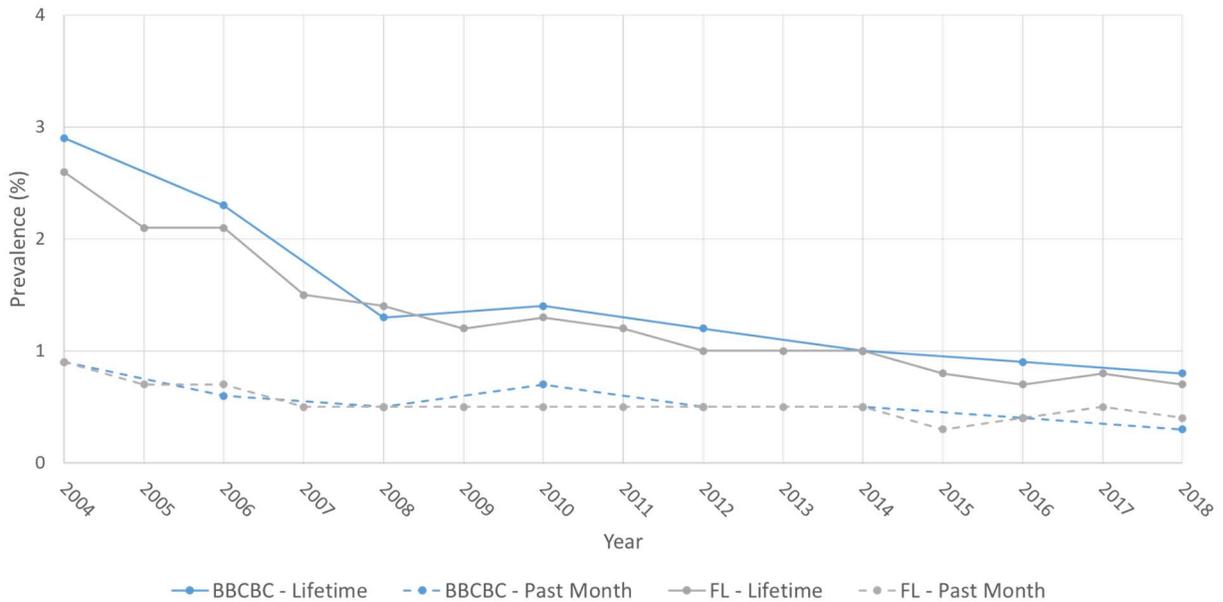


Figure 37. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Big Bend Community Based Care dba NWF Health, 2004 – 2018. Source: [FYSAS](#).

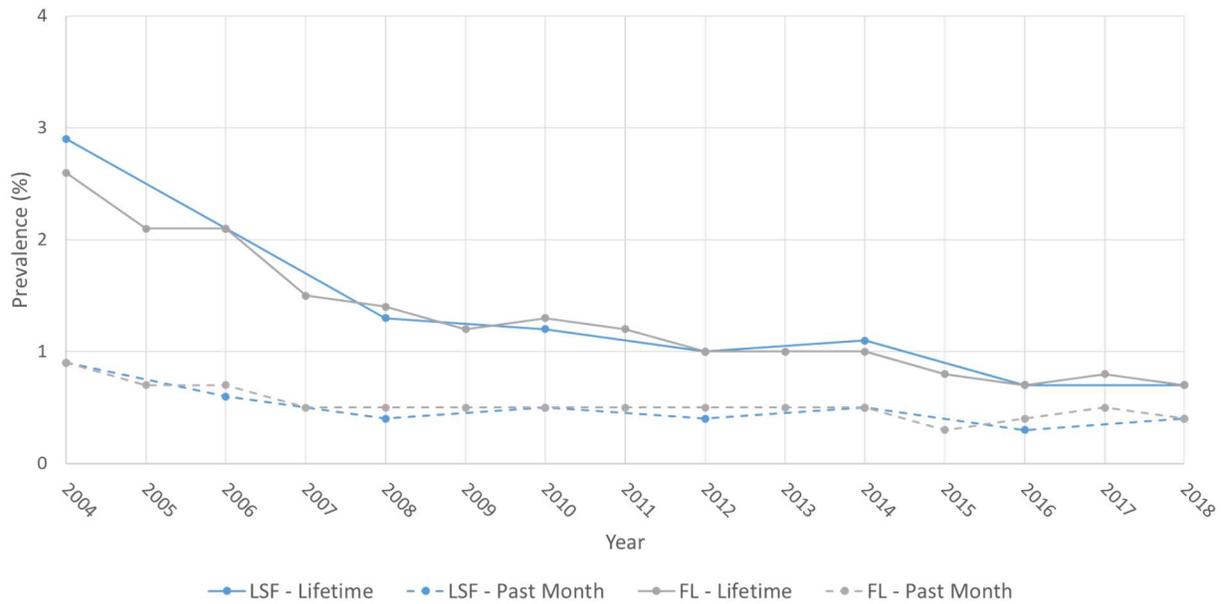


Figure 38. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Lutheran Services Florida, 2004 – 2018. Source: [FYSAS](#).

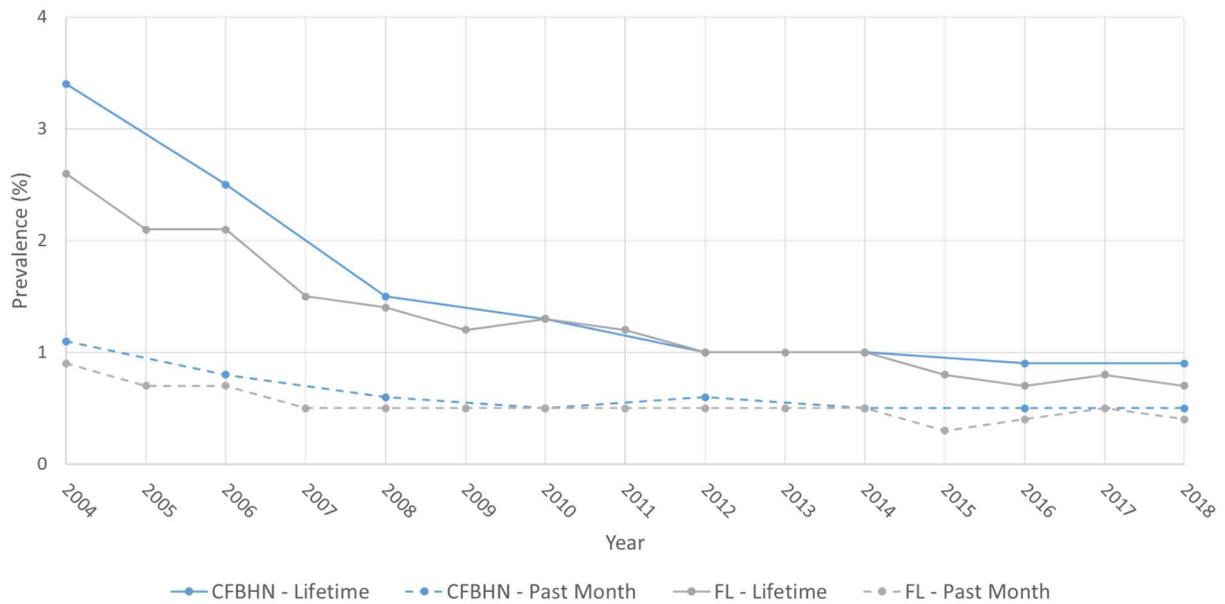


Figure 39. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Central Florida Behavioral Health Network, Inc., 2004 – 2018. Source: [FYSAS](#).

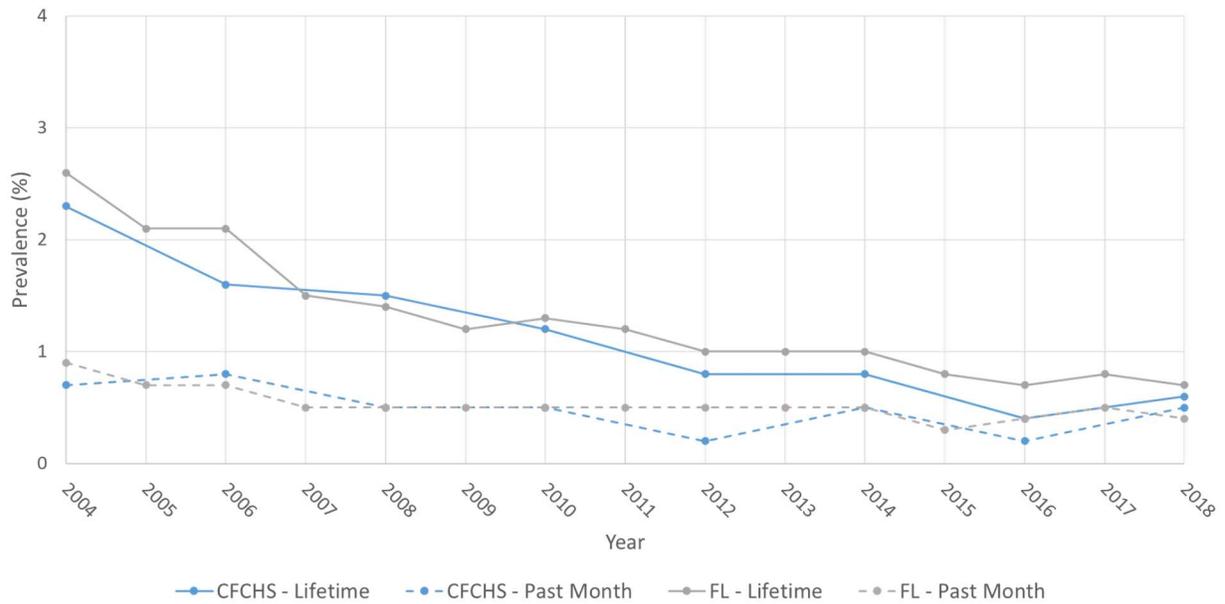


Figure 40. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Central Florida Cares Health System, 2004 – 2018. Source: [FYSAS](#).

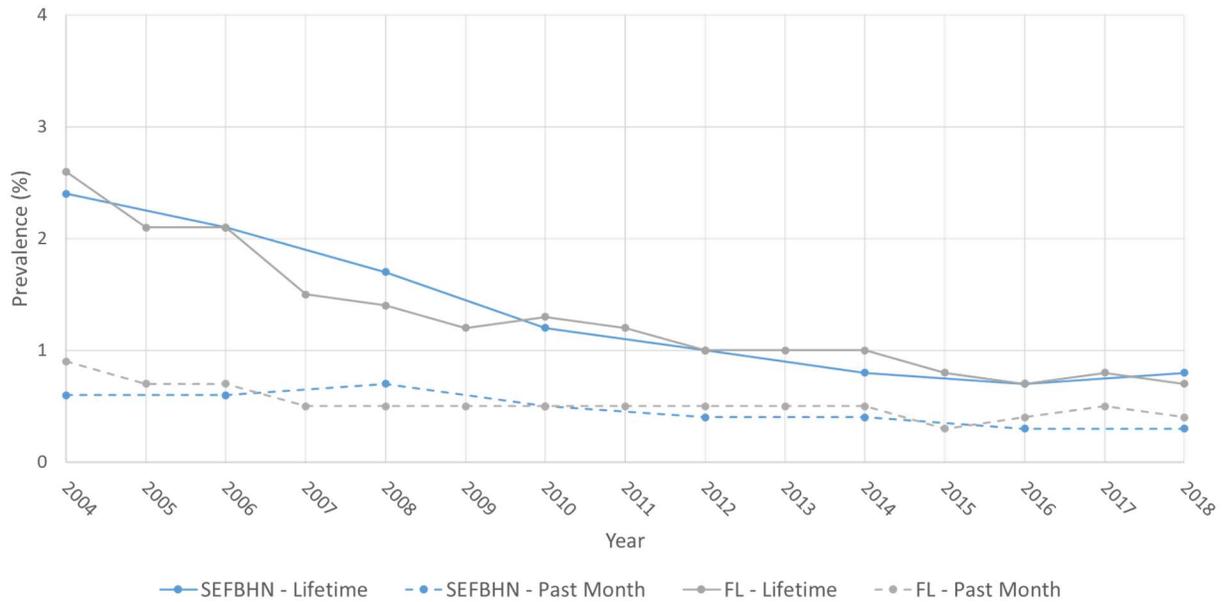


Figure 41. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Southeast Florida Behavioral Health Network, 2004 – 2018. Source: [FYSAS](#).

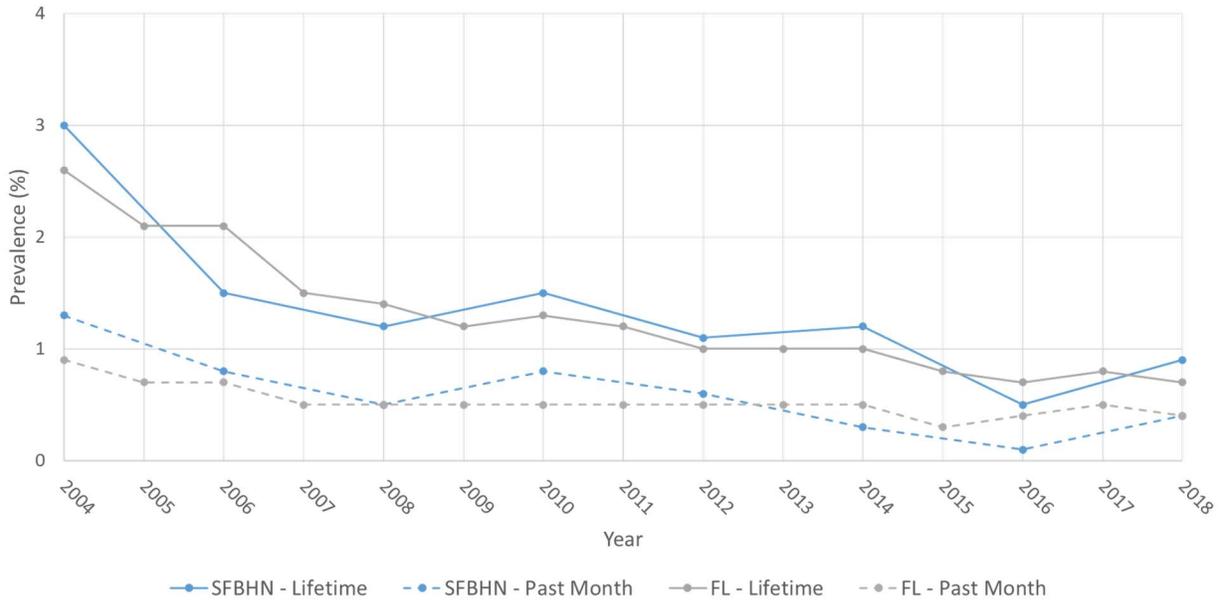


Figure 42. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2004 – 2018. Source: [FYSAS](#).

In Broward County, however, the prevalence of both lifetime and past-month use of methamphetamine among youth is most consistently below that of for Florida overall (Figure 43).

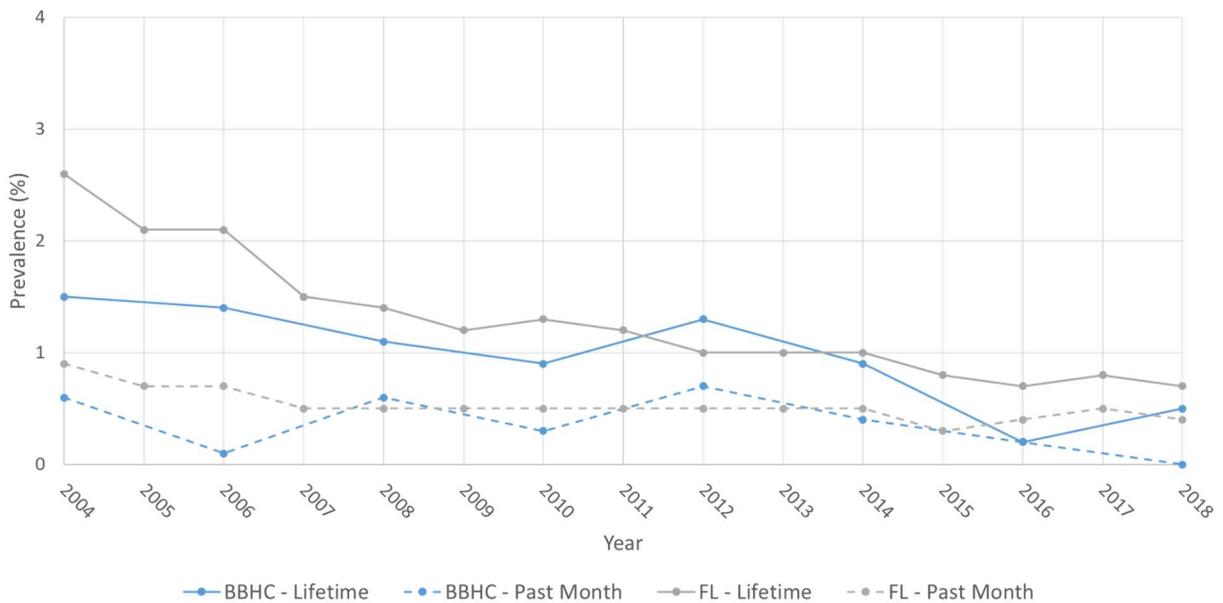


Figure 43. Methamphetamine Use among Youth, Lifetime and Past Month, Florida and Broward Behavioral Health Coalition, 2004 – 2018. Source: [FYSAS](#).

MARIJUANA USE

Made from dried *Cannabis* plants, marijuana is one of the most commonly used substances in the US, second only to alcohol (Abuse, 2019). Though a Schedule 1 drug under federal law, all but eight 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 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

Second to only alcohol among substances covered in this report, just under 10% of adults in Florida endorsed using marijuana in the past month, about two-thirds of the prevalence of marijuana use in the past year (14.5%) (Figure 44). This is an increase over 2016-2017, and part of a slow, but steady increase observed for the period of observation (6.0% and 10.9% in 2002-2003, respectively). The prevalence of marijuana use – in both the past month and year – in the US and Florida is very similar, with rates in the US remaining just above those for Florida since 2003-2004 and 2004-2005, respectively.

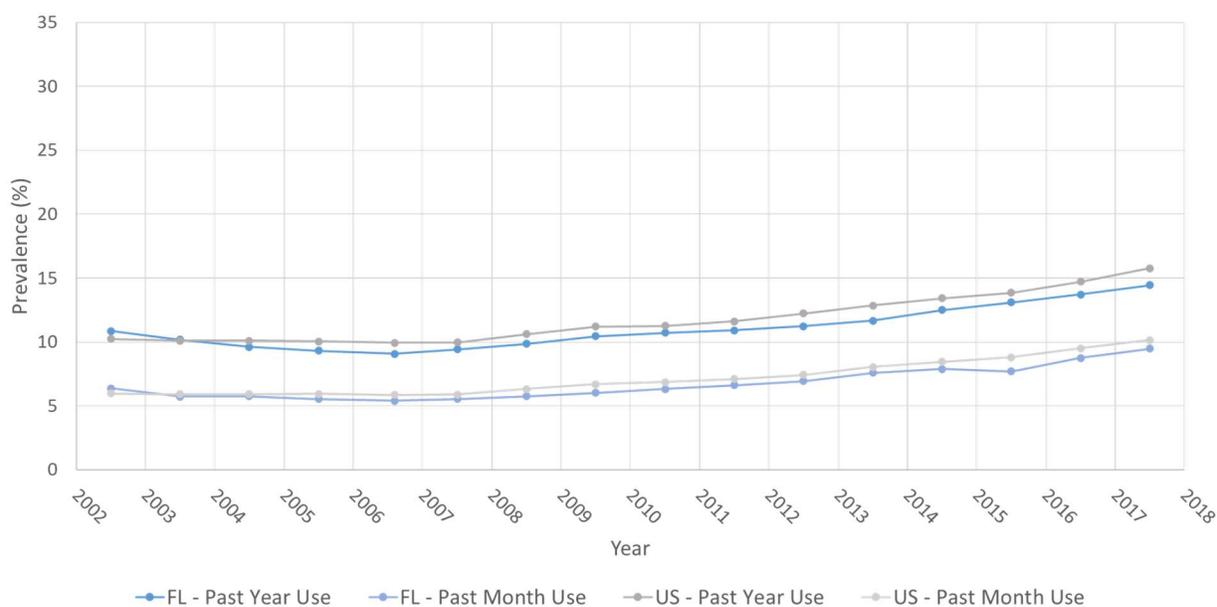


Figure 44. Two-Year Average Marijuana Use Among Adults, Past Year and Past Month, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

There is a fair amount of variability among the MERs, with the prevalence of past-month use of marijuana among adults ranging from as low as 6.8% in the MER served by South Florida Behavioral Health Network, Inc. (SFBHN) dba Thriving Mind to as high as 11.6% in the MER served by Big Bend Community Based Care (BBCBC) (Figure 45). In addition to the panhandle, the prevalence of past-month marijuana use among adults has consistently been above the overall state prevalence (though closer to the state average) in two other MERs, those served by Lutheran Services Florida and Central Florida Cares Health System. The prevalence in the remaining three MERs has been both above and below the

state prevalence overall. The MER served by SFBHN is the only region to have a prevalence consistently below the state overall.

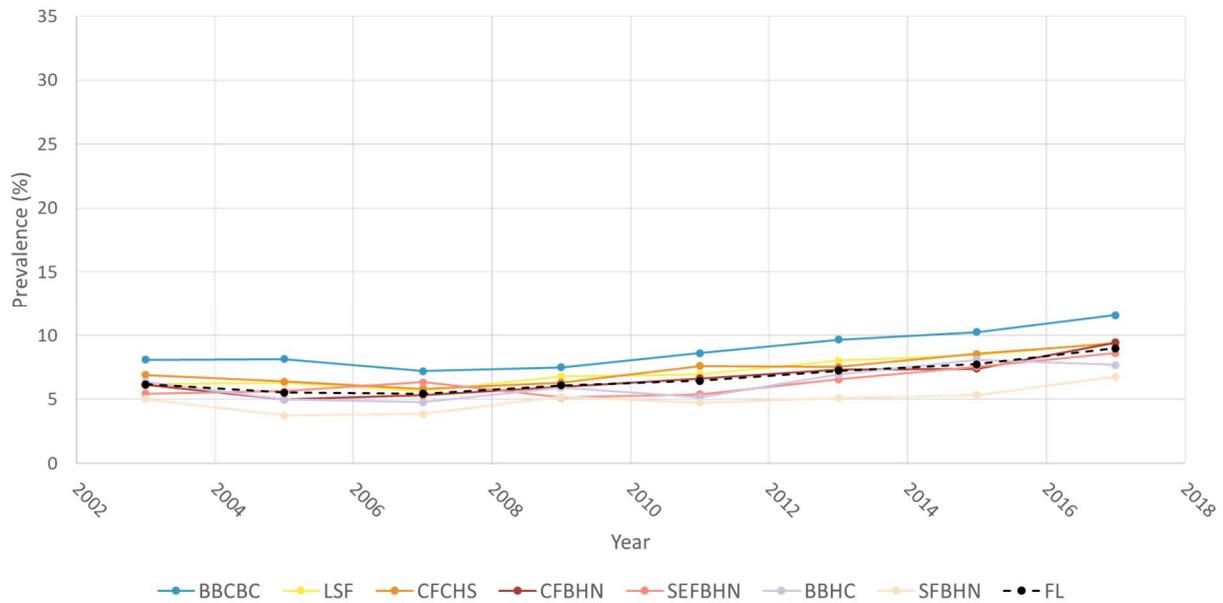


Figure 45. Three-Year Average Past Month Marijuana Use among Adults, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

When examining past-year use of marijuana among adults in Florida among the MERs, the variability is even greater, though the pattern is very similar (Figure 46). The highest prevalence (17.8%) is again observed in the MER in the panhandle served by BBCBC dba NWF Health, and the lowest prevalence (10.3%) is again observed in the MER in South Florida served by SFBHN dba Thriving Mind.

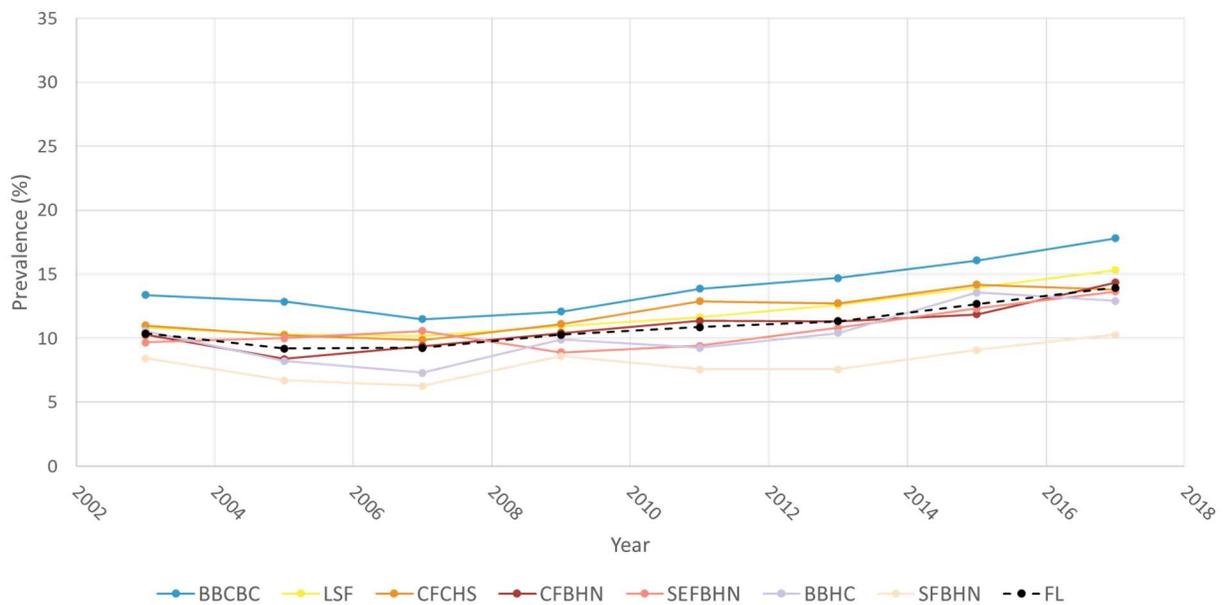


Figure 46. Three-Year Average Past-year Marijuana Use among Adults, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

Due to this variability, the past-month and -year prevalence of marijuana use among adults is shown along with the prevalence for the state of Florida for each MER (Figures 47 – 53).

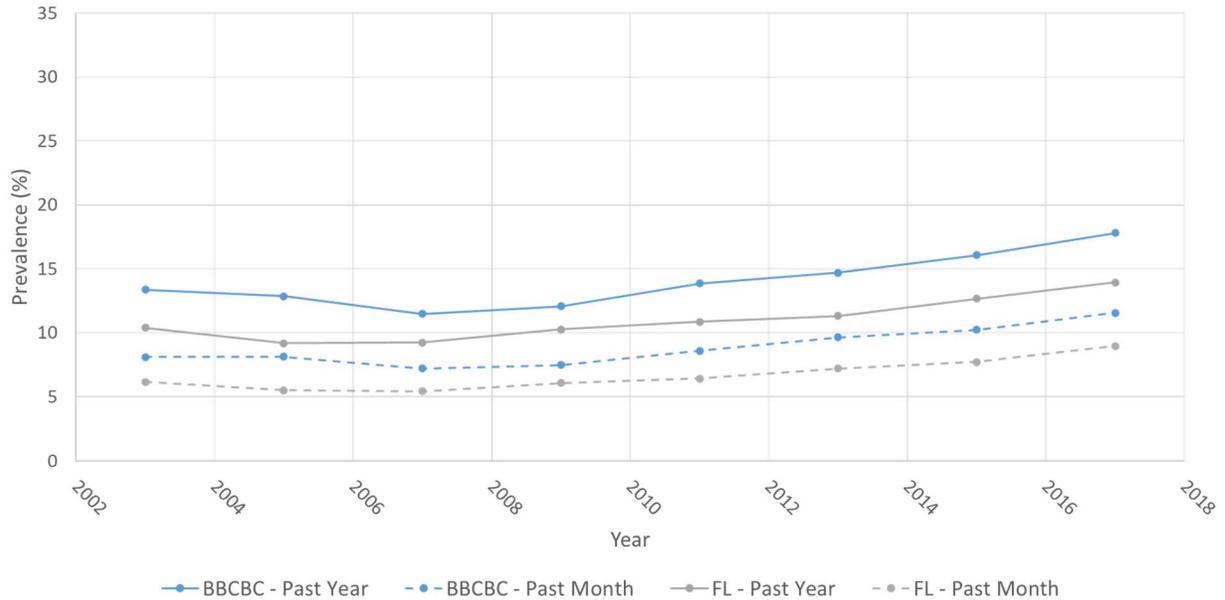


Figure 47. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Big Bend Community Based Care dba NWF Health, 2002 – 2018. Source: [NSDUH](#).

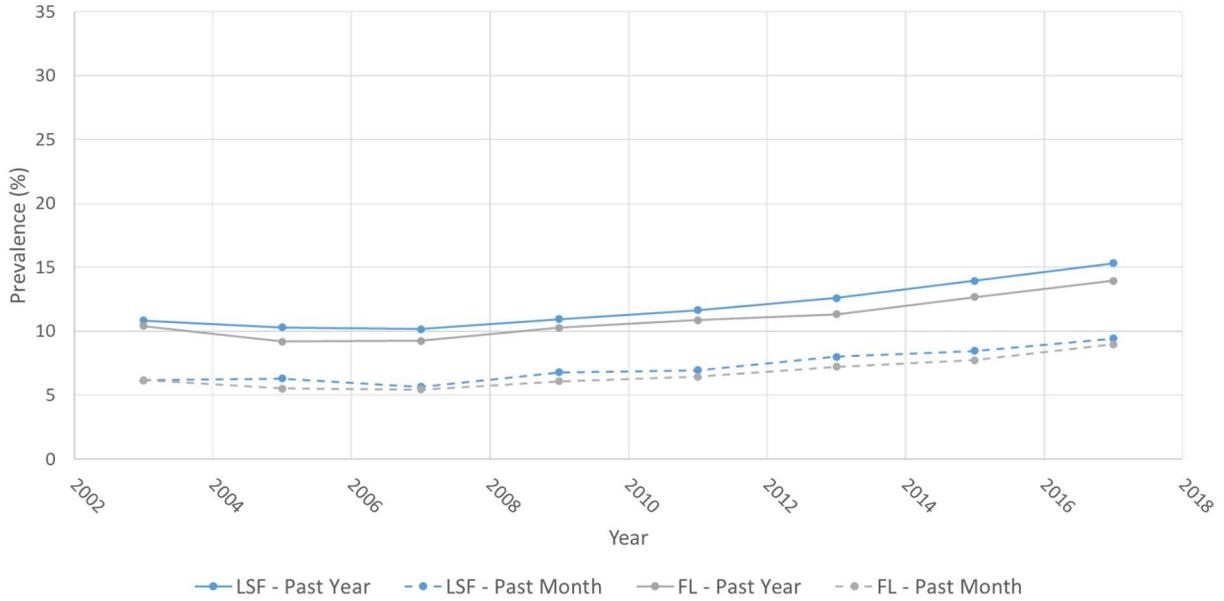


Figure 48. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Lutheran Services Florida, 2002 – 2018. Source: [NSDUH](#).

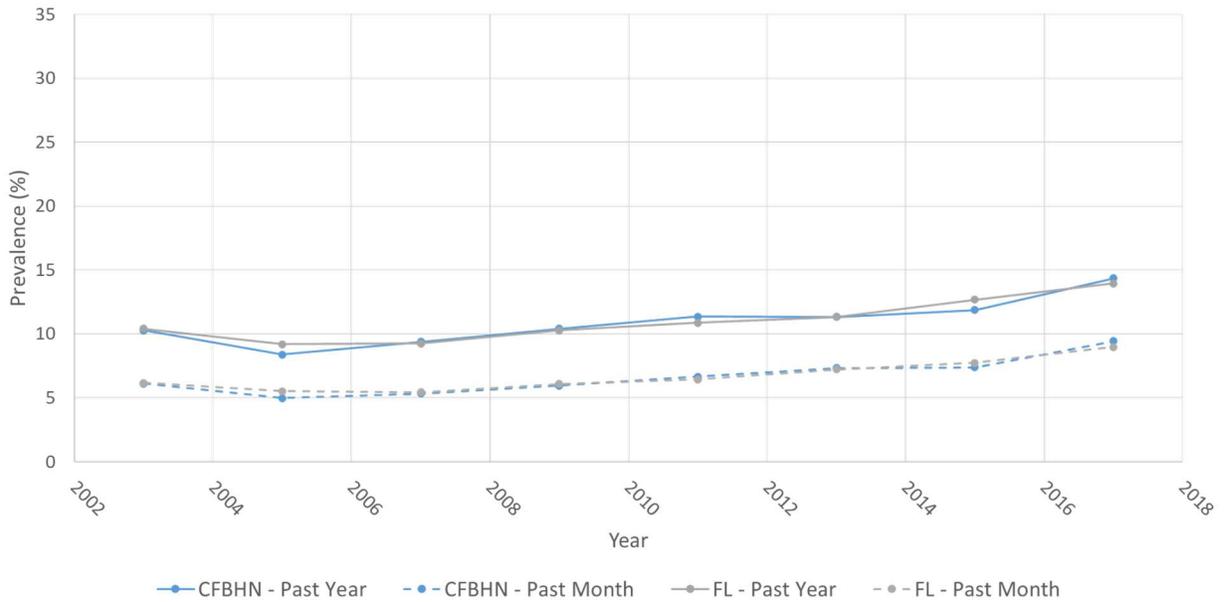


Figure 49. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Central Florida Behavioral Health Network, Inc., 2002 – 2018. Source: [NSDUH](#).

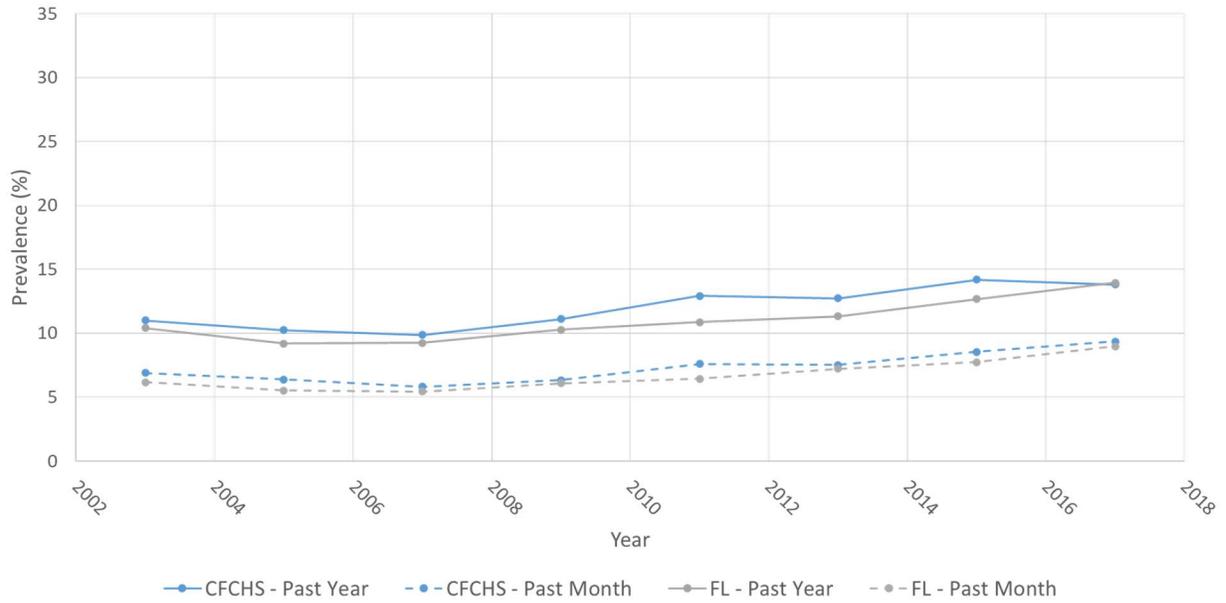


Figure 50. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Central Florida Care Health System, 2002 – 2018. Source: [NSDUH](#).

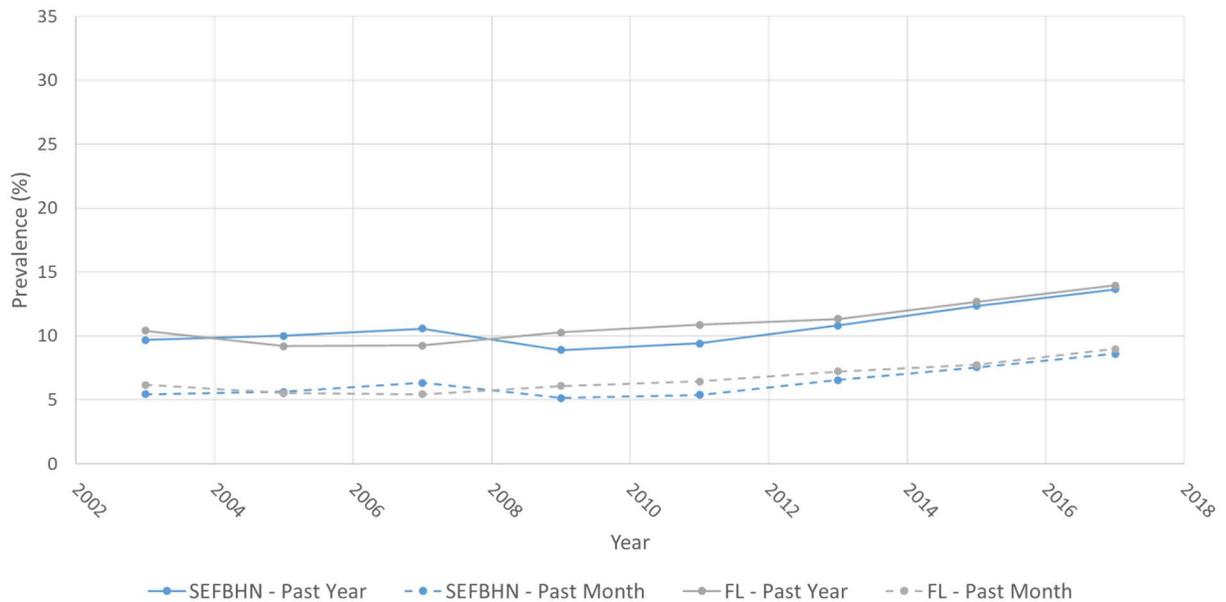


Figure 51. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Southeast Florida Behavioral Health Network, 2002 – 2018. Source: [NSDUH](#).

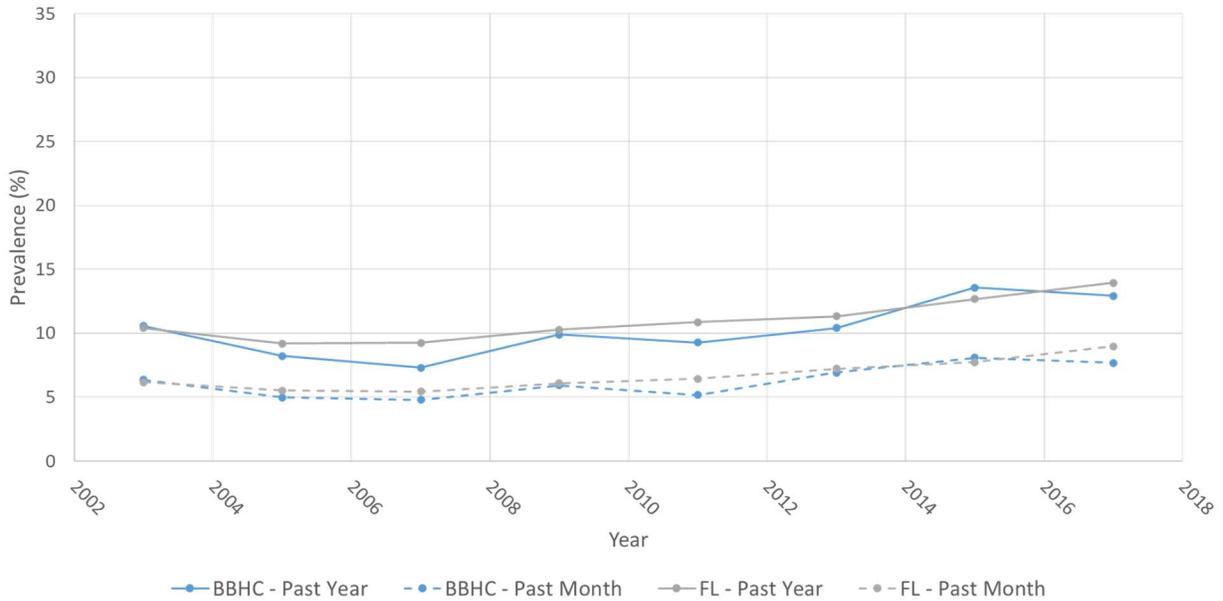


Figure 52. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and Broward Behavioral Health Coalition, 2002 – 2018. Source: [NSDUH](#).

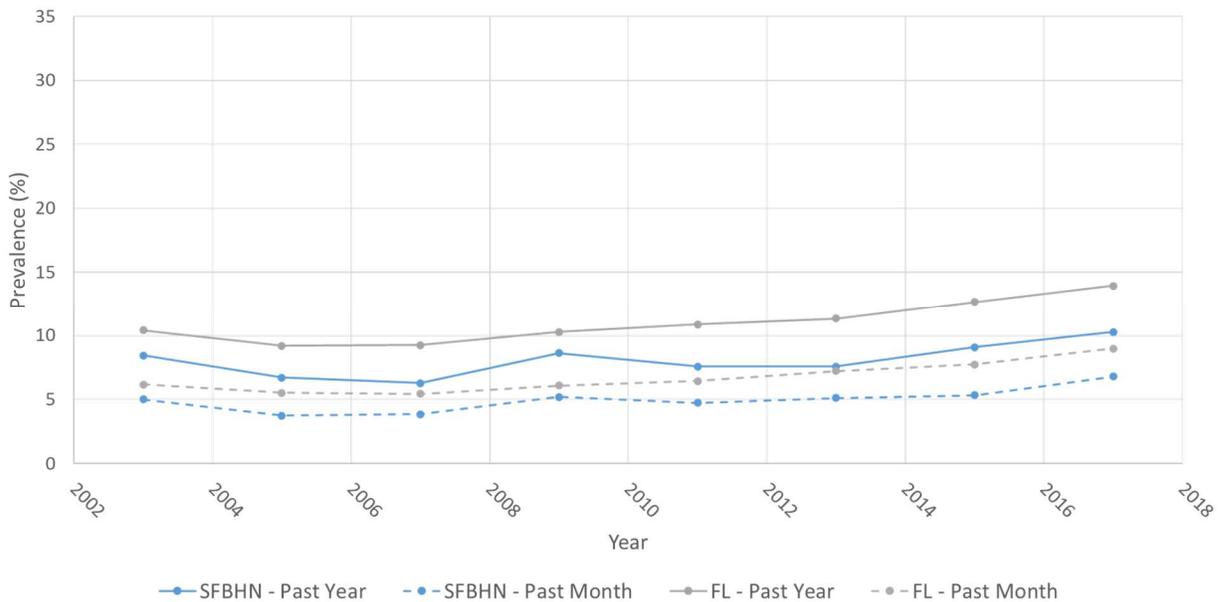


Figure 53. Three-Year Average Marijuana Use among Adults, Past Year and Past Month, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2002 – 2018. Source: [NSDUH](#).

Marijuana Use among Youth

Based on data from the *National Survey on Drug Use and Health*, the trends in marijuana use among youth differ from that of adults in the state (Figure 44 and Figure 54). While the prevalence of both past-year and -month marijuana use among adults has increased over time, the prevalence of both among

Florida youth has decreased to 13.0% and 7.1% in 2017-2018, respectively. Both the past-year and – month prevalence of marijuana use among youth in Florida is very similar to that among youth in the country as a whole, with rates tracking very closely throughout the period of observation, though rates in Florida have risen above rates in the US in recent years.

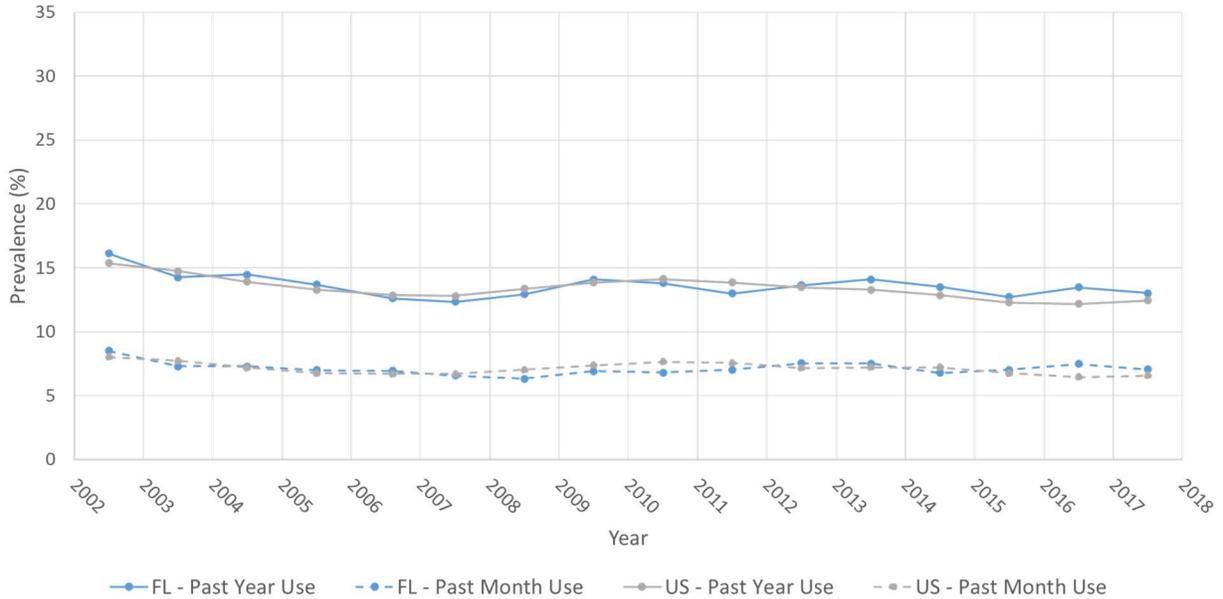


Figure 54. Two-Year Average Marijuana Use among Youth, Past Year and Past Month, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

Greater variability by MER is observed for past-year use of marijuana than past-month marijuana use among Florida’s youth (Figure 55 and Figure 56).



Figure 55. Three-Year Average Past-month Marijuana Use among Youth, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

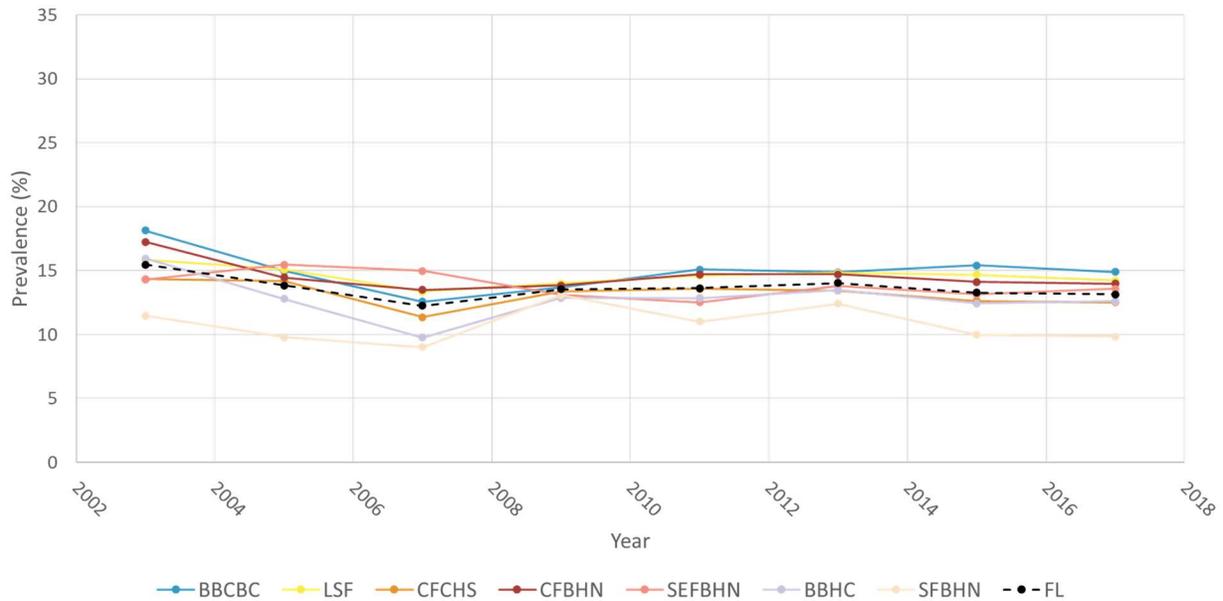


Figure 56. Three-Year Average Past-year Marijuana Use among Youth, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

Based on data collected during [Monitoring the Future](#) and the [Florida Youth Substance Abuse Survey](#), rates of marijuana use differ more between the US and Florida, with rates for the US as a whole consistently above rates for Florida (Figure 57). These differences are likely reflected by variations in the way respondents are sampled and recruited for the surveys as well as the administration of the surveys and the instruments. That said, similar trends in past-month use are observed in both surveys, with the prevalence of past-month use among youth in Florida declining from 11.4% in 2006 to 10.4% in 2019. Lifetime use has also declined in Florida since 2013, leveling off at 20.2% in 2018 and 2019. The prevalence of both past-month and lifetime use among Florida continues to diverge from that of the nation as a whole, with the recent prevalence in the US increasing overall.

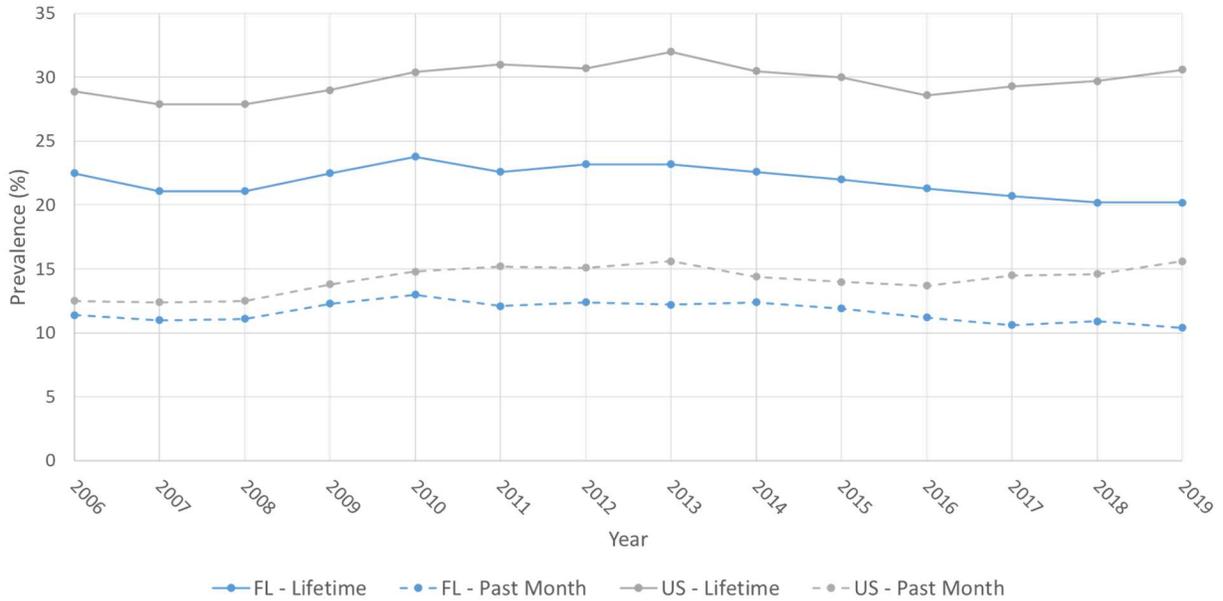


Figure 57. Marijuana Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

There is some variability in the prevalence of lifetime marijuana use among the MERs (Figure 58).

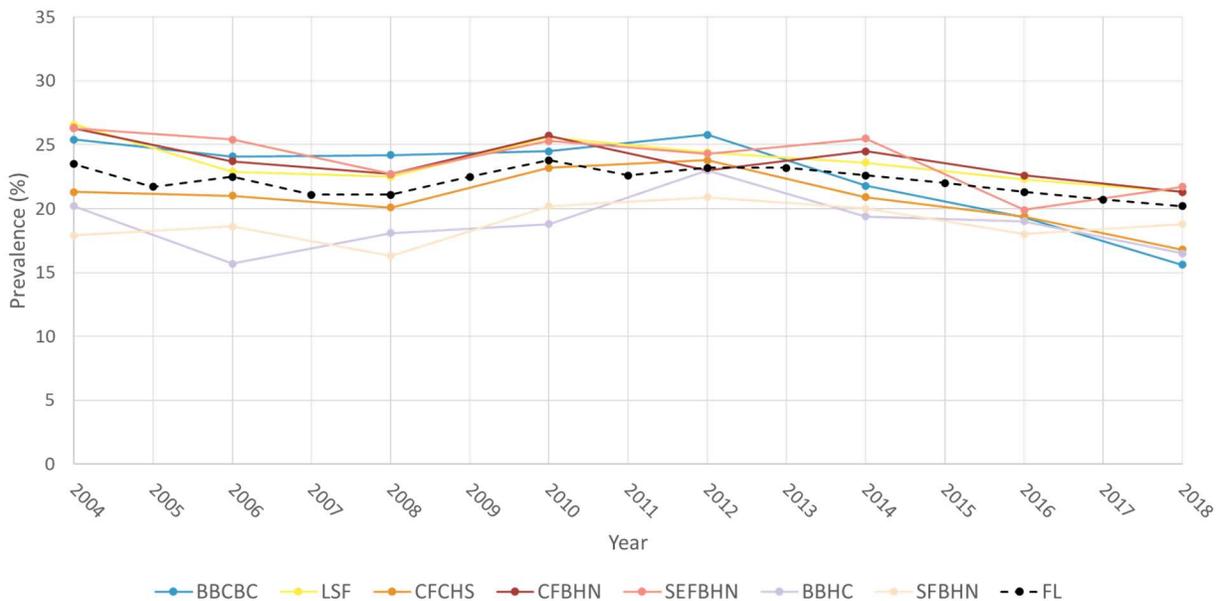


Figure 58. Lifetime Marijuana Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

The lifetime prevalence of marijuana use among youth was consistently above that for the state in two of the MERs – those served by Lutheran Services Florida and Central Florida Behavioral Health Network, Inc. (Figures 59 – 60), though the trend remained downward.

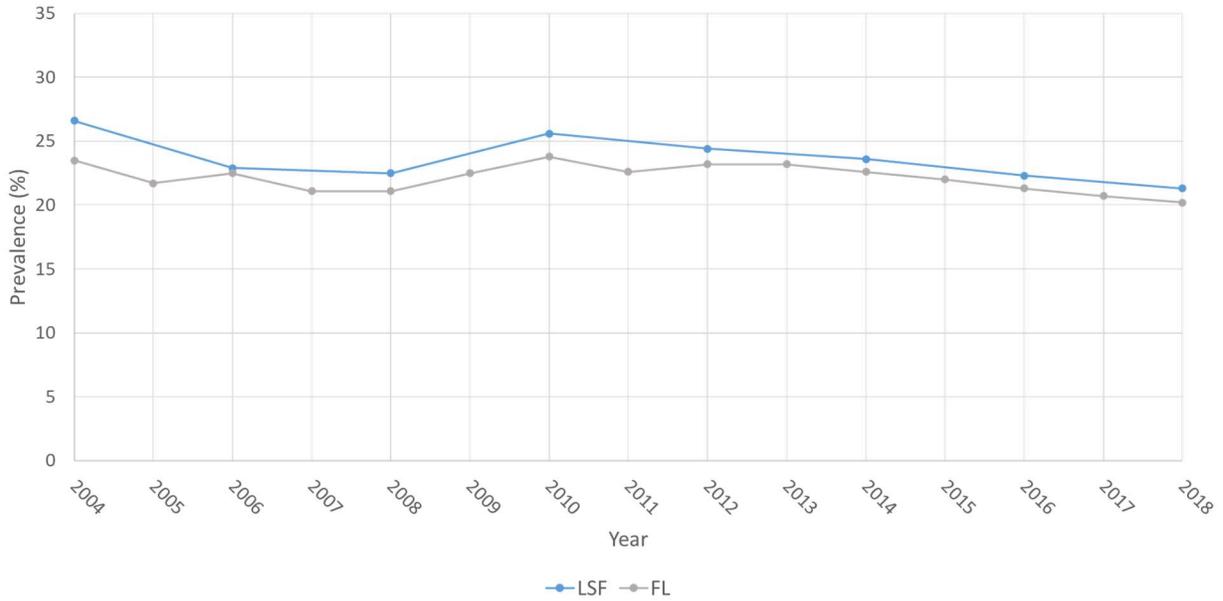


Figure 59. Lifetime Marijuana Use among Youth, Florida and Lutheran Services Florida, 2004 – 2018. Source: [FYSAS](#).

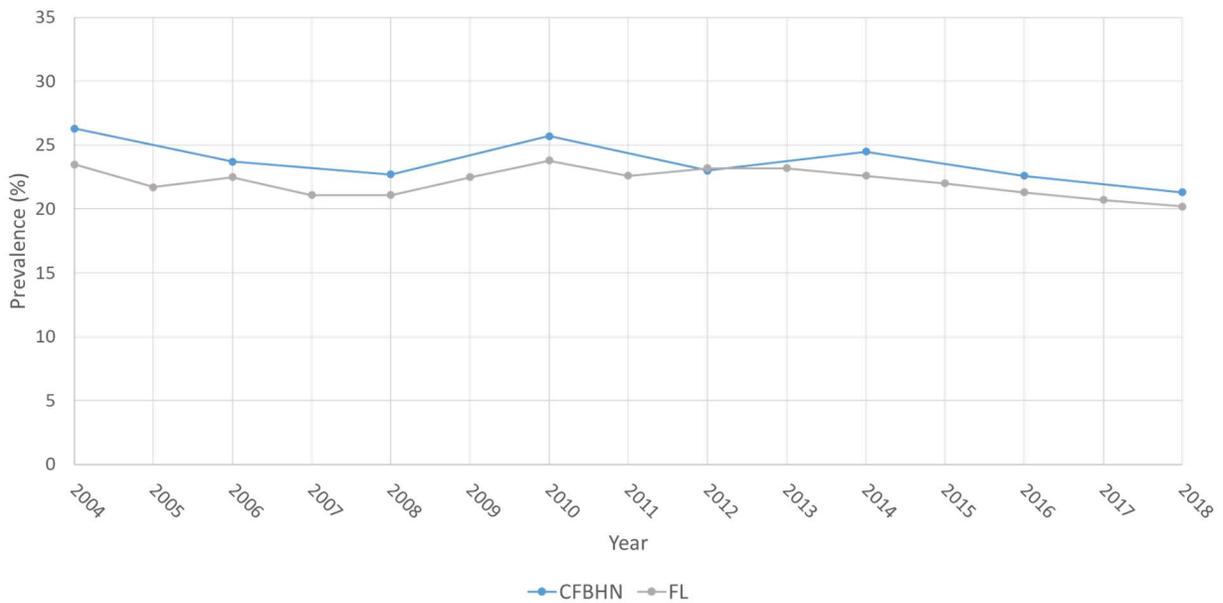


Figure 60. Lifetime Marijuana Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2004 – 2018. Source: [FYSAS](#).

A similar pattern was also observed in the MER served by the Southeast Florida Behavioral Health Network, with one exception: the prevalence dropped below that of the state in 2016, but rebounded to a rate above that for the state in 2018.

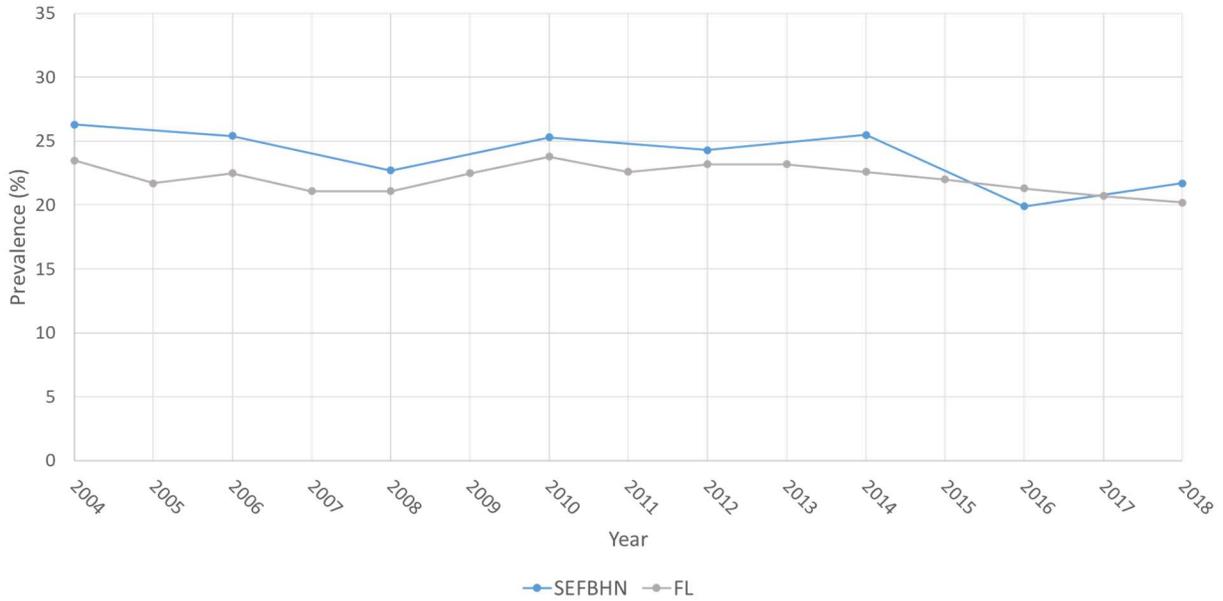


Figure 61. Lifetime Marijuana Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2004 – 2018. Source: [FYSAS](#).

In two MERs – those served by Big Bend Community Base Care and Central Florida Cares Health System, the region-specific prevalence of lifetime marijuana use among youth was above that for Florida as a whole in the beginning of the period of observation but declines below the overall state rate in the latter part of the time period (Figure 62 and Figure 63). The trend in both of these MERs was also downward.

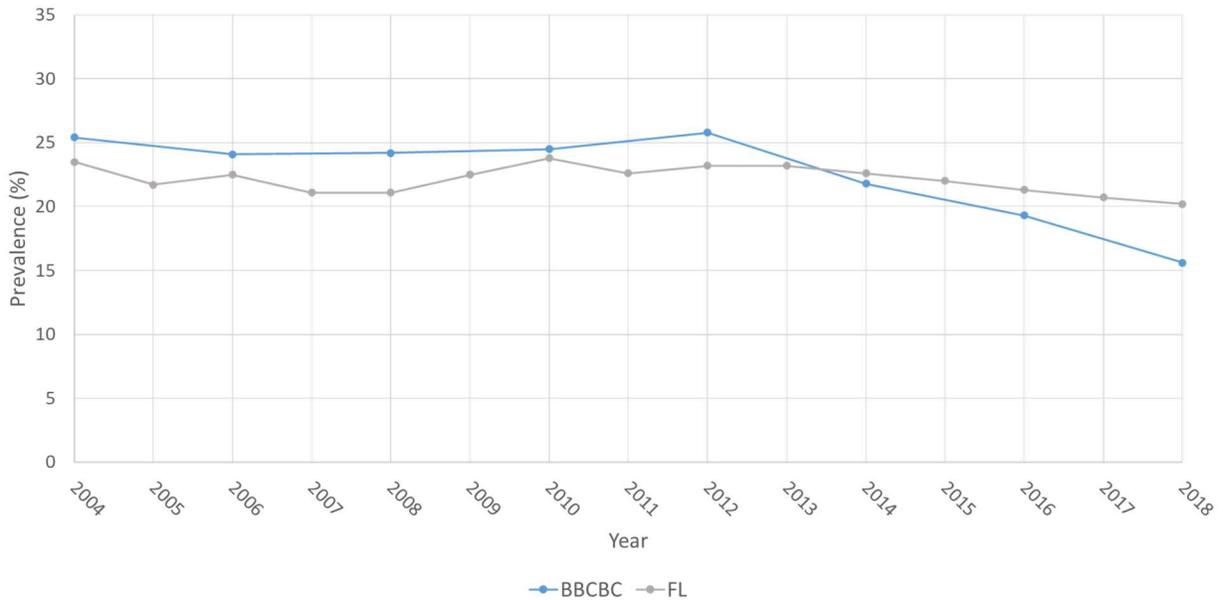


Figure 62. Lifetime Marijuana Use among Youth, Florida and Big Bend Community Based Care, 2004 – 2018. Source: [FYSAS](#).

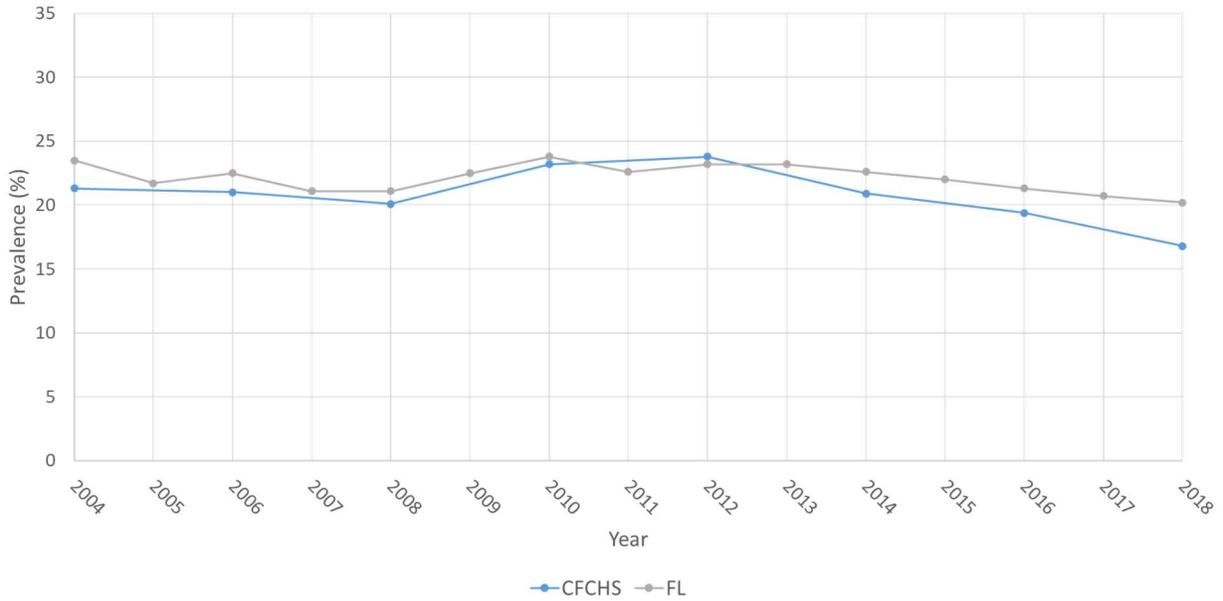


Figure 63. Lifetime Marijuana Use among Youth, Florida and Central Florida Cares Health System, 2004 – 2018. Source: [FYSAS](#).

The two MERs in which the prevalence of lifetime marijuana use among youth was consistently below that of the state as a whole are those served by the Broward Behavioral Health Coalition and the South Florida Behavioral Health Network, Inc. (Figure 64 and Figure 65), though the trends in these MERs were level and upward, respectively.

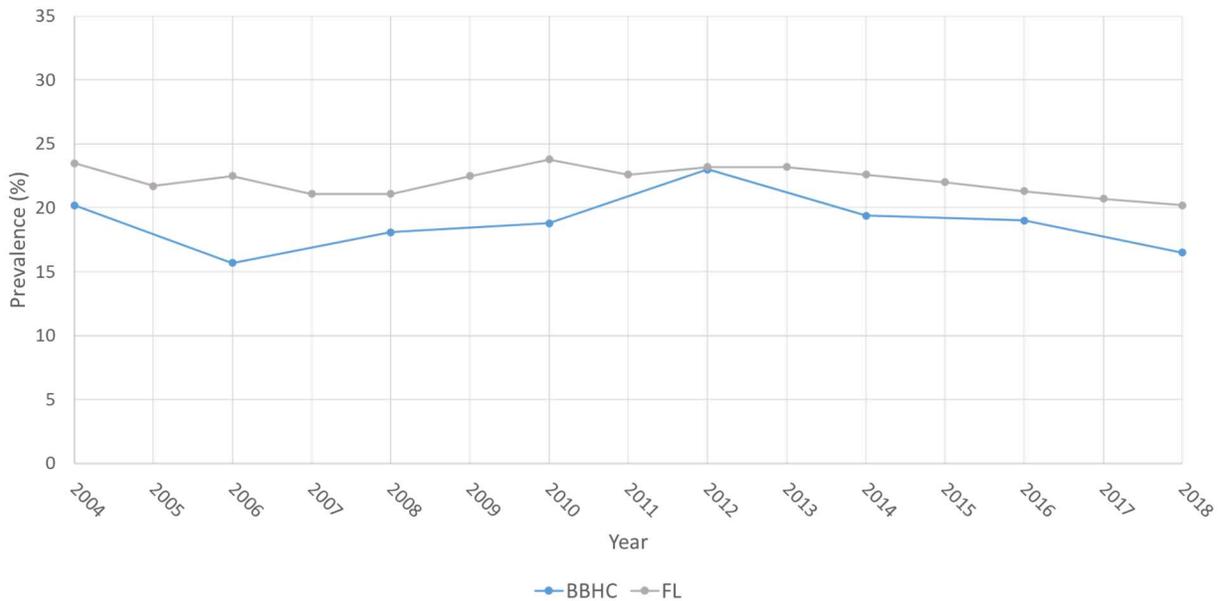


Figure 64. Lifetime Marijuana Use among Youth, Florida and Broward Behavioral Health Coalition, 2004 – 2018. Source: [FYSAS](#).

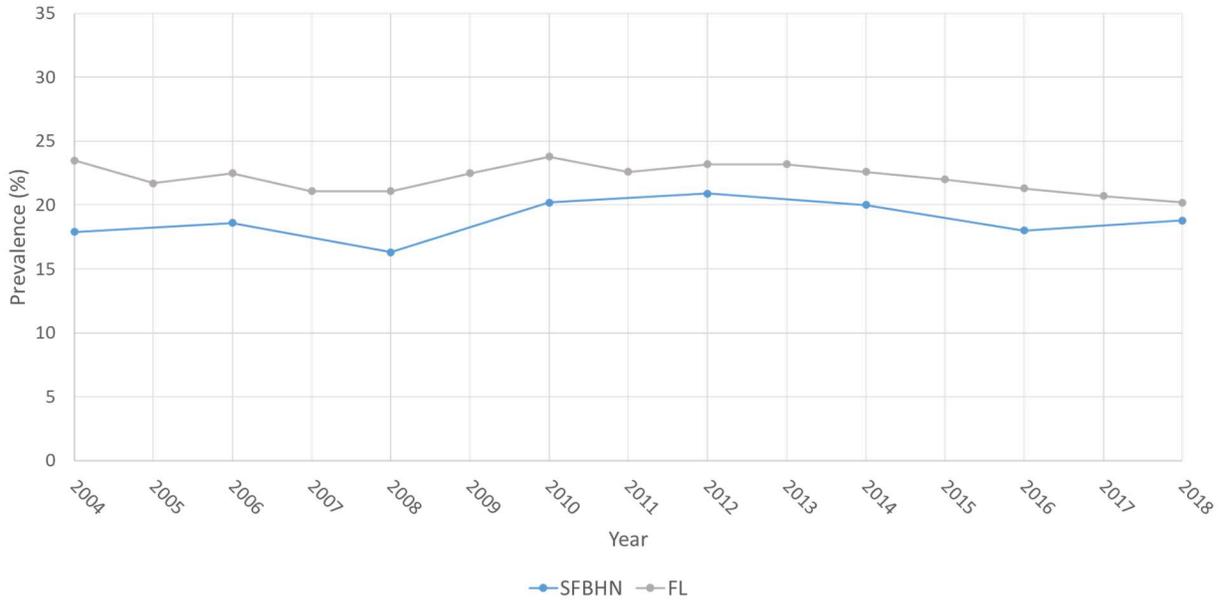


Figure 65. Lifetime Marijuana Use among Youth, Florida and South Florida Behavioral Health Network, Inc., 2004 – 2018. Source: [FYSAS](#).

The variability in past-month marijuana use among youth in Florida by MER was less than that for lifetime use (Figure 66).

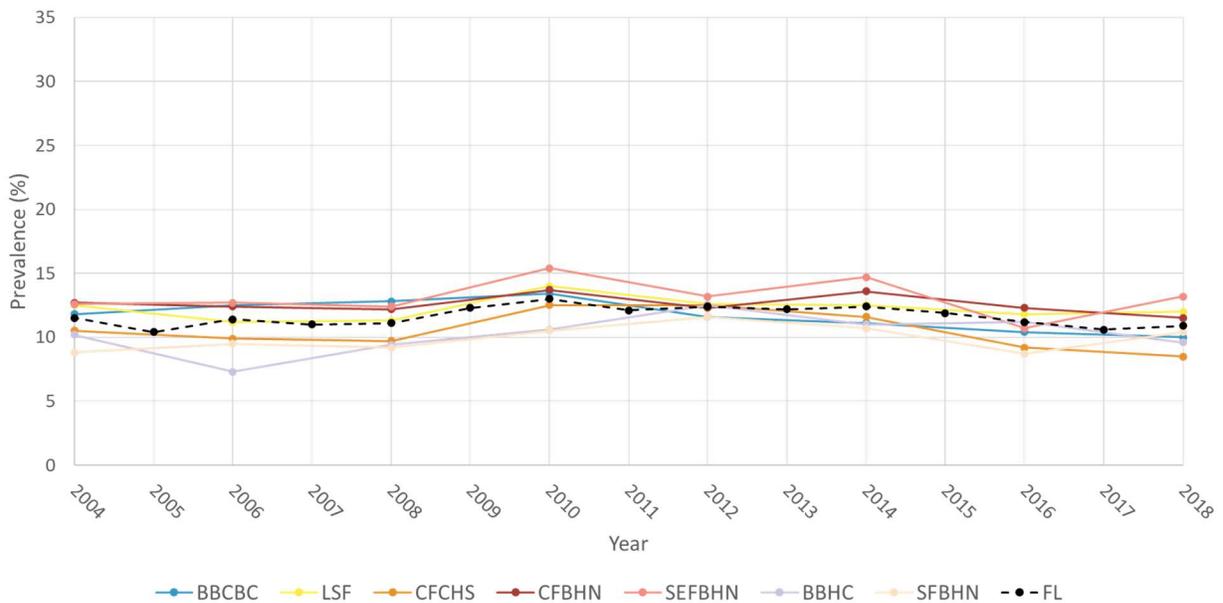


Figure 66. Past Month Marijuana Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

The prevalence of lifetime use of synthetic marijuana among youth is lower than marijuana, and has declined more quickly among Florida youth (Figure 57 and Figure 67). The variability in the prevalence by MER has declined markedly over the period of observation, with MER-specific rates being very close

to the prevalence for the state as a whole (Figure 67). Notably, however, the prevalence in the MER served by South Florida Behavioral Health Network, Inc. and Broward Behavioral Health Coalition increased from 2016 to 2018, unlike in every other MER, in which the prevalence continued to decline.

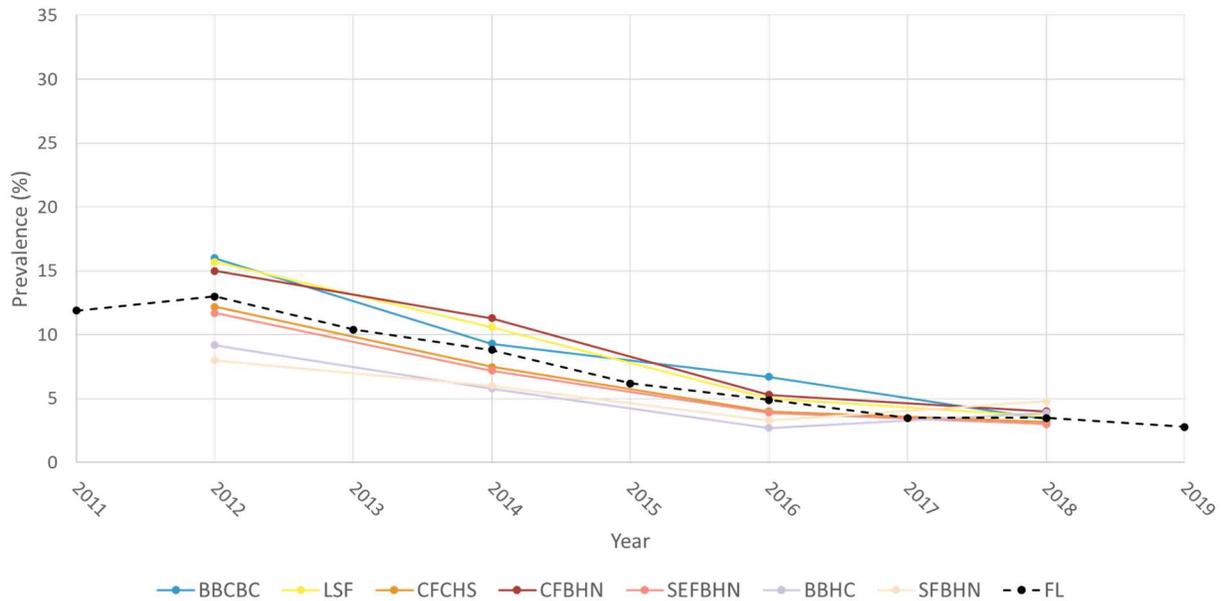


Figure 67. Lifetime Synthetic Marijuana Use among Youth, Florida and Managing Entity Regions, 2011 – 2019. Source: [FYSAS](#).

A similar trend in past-month use of synthetic marijuana among youth has been observed: use of synthetic marijuana is markedly lower than that of marijuana use among youth in Florida and the prevalence is trending downward over time (Figure 57 and Figure 68). Following more variability among MERs early in the period (2012), the MER-specific prevalence rates were more similar for two time points (2014 and 2016), followed by an increase in variability among MER-specific prevalence rates (Figure 68). Only two MERs (those served by Big Bend Community Based Care dba NWF Health and Southeast Florida Behavioral Health Network) saw a decline in prevalence from 2016 to 2018. These increases are consistent with the increase in prevalence observed for the state as a whole from 2017 to 2018. Though MER-specific prevalence rates are yet available for 2019, the rate in Florida did decrease again from 2018 to 2019.

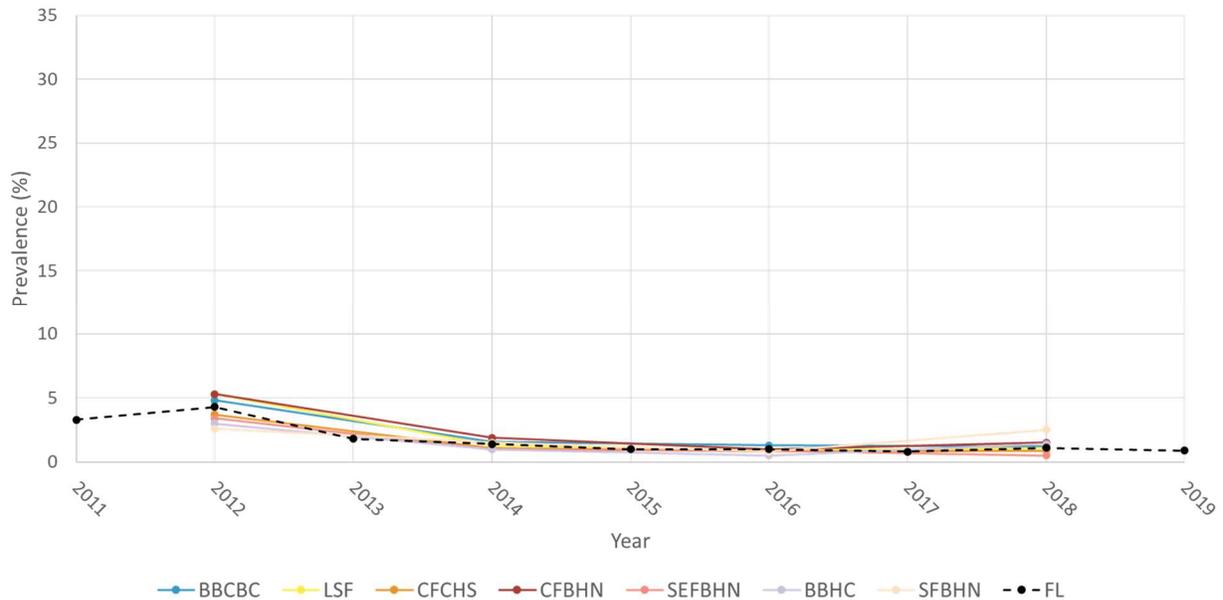


Figure 68. Past Month Synthetic Marijuana Use among Youth, Florida and Managing Entity Regions, 2011 – 2019. Source: [FYSAS](#).

ALCOHOL USE

Alcohol use is common in the US. Though alcohol can be used in a way that mitigates harm, consuming too much alcohol can result in a range of negative health consequences including alcohol use disorder and death as well as increased risk of other negative health impacts such as increased engagement in risky and/or violent behaviors.

Alcohol Use among Adults

Though the overall trend for the time period of observation is upward, the prevalence of past-month alcohol use among adults in Florida has declined recently to 54.2% in 2017-2018 (Figure 69). The prevalence of alcohol use among adults is similar in Florida to that of the US as a whole. A similar trend has been observed for binge drinking among adults as well: the overall trend is slightly upward, but the prevalence has declined for both of the most recent time points (2016-2017 and 2017-2018) to 24.4%. Note the disruption in the data due to changes made to the [National Survey on Drug Use and Health](#), similar to breaks in the series seen in previous figures.

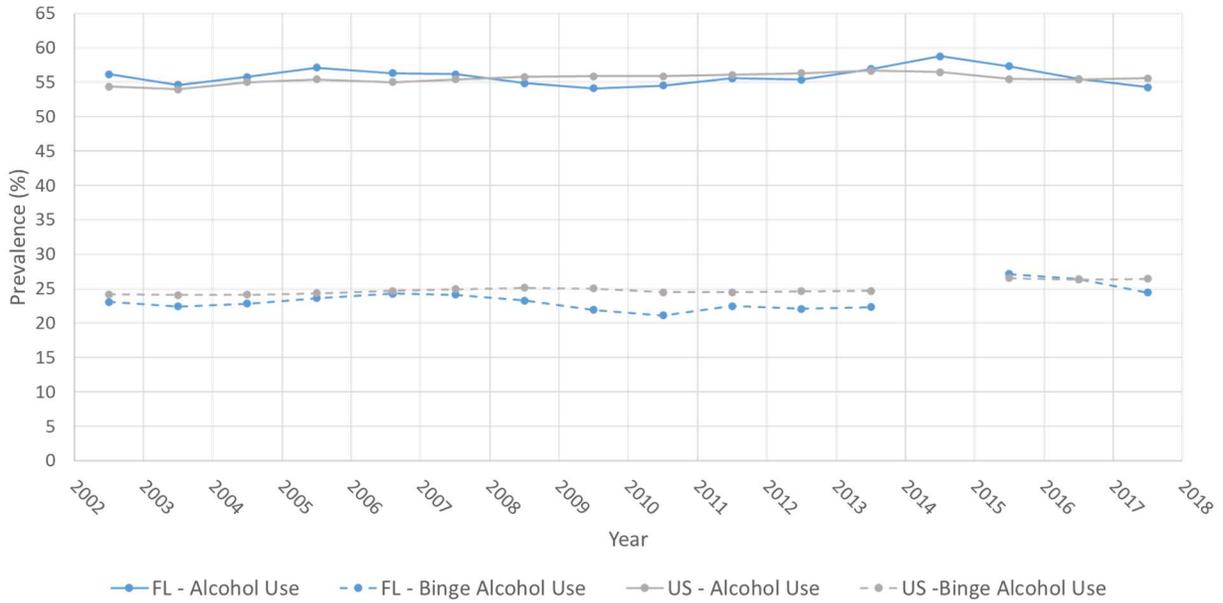


Figure 69. Two-Year Average Past Month Alcohol Use among Adults, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

There is little variation between the MERs with regard to the prevalence of past-month alcohol use among adults in Florida, with one notable exception (Figure 70); the prevalence in the MER served by South Florida Behavioral Health Network, Inc. dba Thriving Mind was much lower than in the other MERs until 2016-2018.

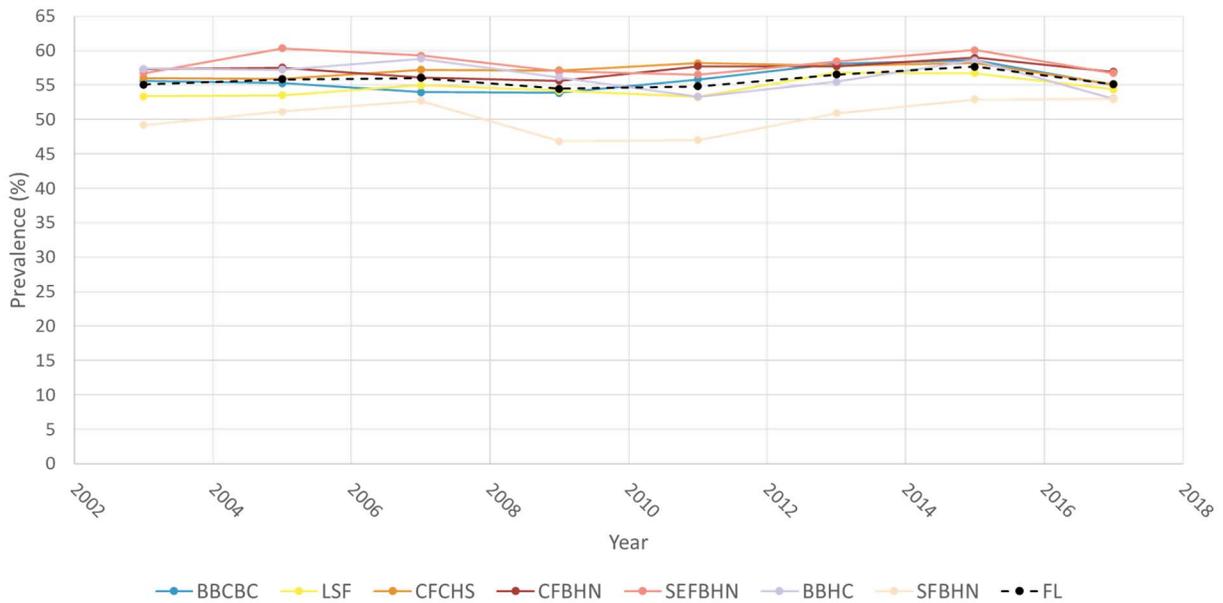


Figure 70. Three-Year Average Past Month Alcohol Use among Adults, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

Alcohol Use among Youth

Both past-month and binge alcohol use among youth – in Florida and the US – is declining (Figure 71). Past-month use declined among Florida youth from 17.7% in 2002-2003 to 9.2% in 2015-2016, after which the prevalence has risen for the last two time periods to 10.1% in 2017-2018. Following a series high in 2006-2007 of 10.4%, the prevalence of binge drinking among Florida’s youth declined to 4.9% in 2015-2016, also followed by a two time period increase to 5.0% for the latest years, 2017-2018. The prevalence in the state and the nation as a whole are very similar throughout the time period. Note the same break in the data series due to changes in the [National Survey on Drug Use and Health](#).

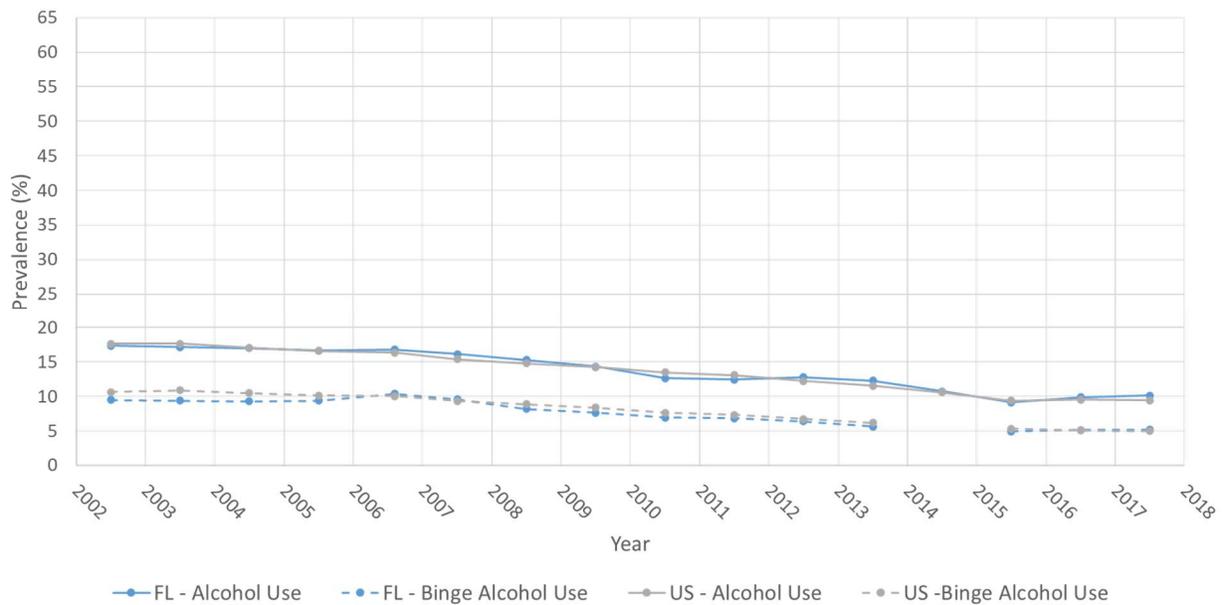


Figure 71. Two-Year Average Past Month and Binge Alcohol Use among Youth, United States and Florida, 2002 – 2018. Source: [NSDUH](#).

When examining the prevalence of past-month alcohol use among Florida’s youth, there is little difference between the various MERs, with the MER-specific prevalence rates all very close to that for the state as a whole (Figure 72).

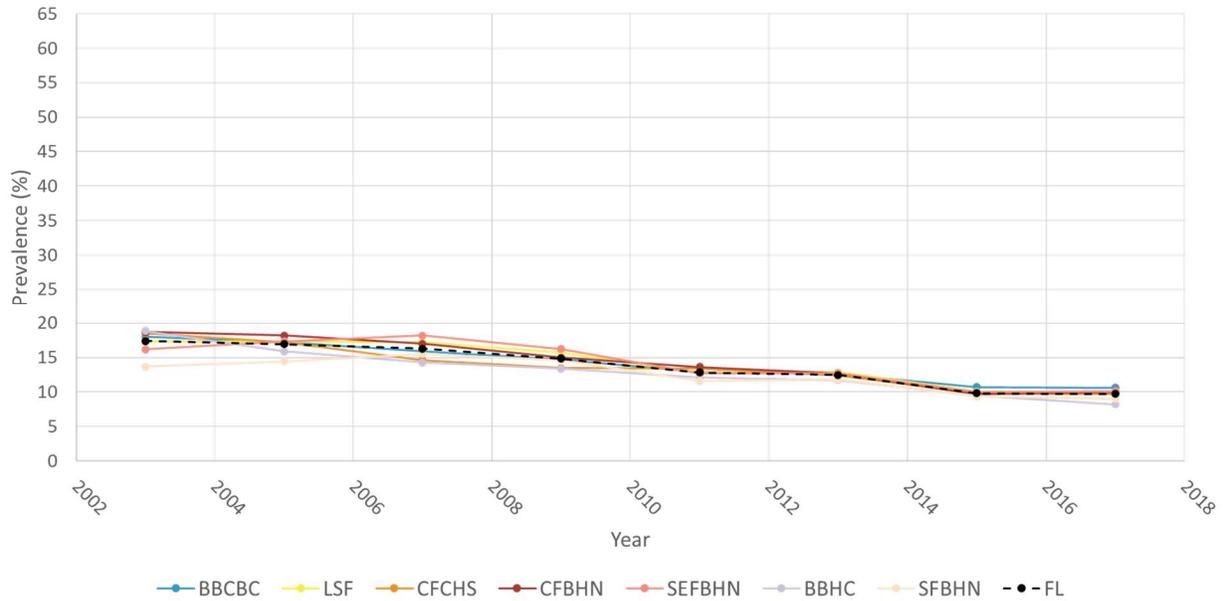


Figure 72. Three-Year Average Past Month Alcohol Use among Youth, Florida and Managing Entity Regions, 2002 – 2018. Source: [NSDUH](#).

Though the prevalence of *lifetime* use of alcohol among youth was similar to that of *past-month* use among adults early in the period of observation, lifetime use among youth in Florida and the US has steadily declined from 56.1% and 57.0%, respectively, in 2006 to 41.2% and 36.5% in 2018 (Figure 69 and Figure 73). The prevalence went up slightly the last year to 36.8% and 41.5%, respectively in 2019. Similar to what has been observed for other substances, the prevalence of past-month drinking estimated through [Monitoring the Future](#) and the [Florida Youth Substance Abuse Survey \(FYSAS\)](#) is higher than that reported in the [National Survey on Drug Use and Health](#) (Figure 71 and Figure 73). Following the series high of 32.0% in the first year under observation (2006), the prevalence of past-month alcohol use among youth in Florida steadily declined to 14.8% in 2019 (Figure 73).

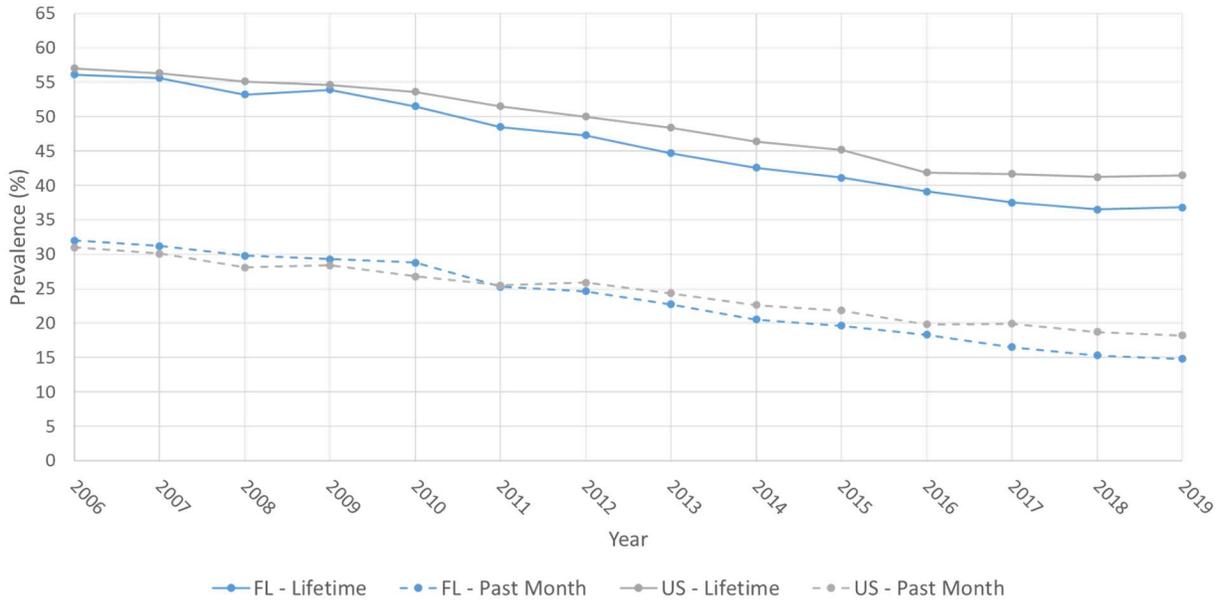


Figure 73. Alcohol Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

Little variability in both lifetime and past-month use of alcohol among youth across Florida is observed among the MERs (Figure 74 and Figure 75). The downward trends are observed uniformly for all MERs.

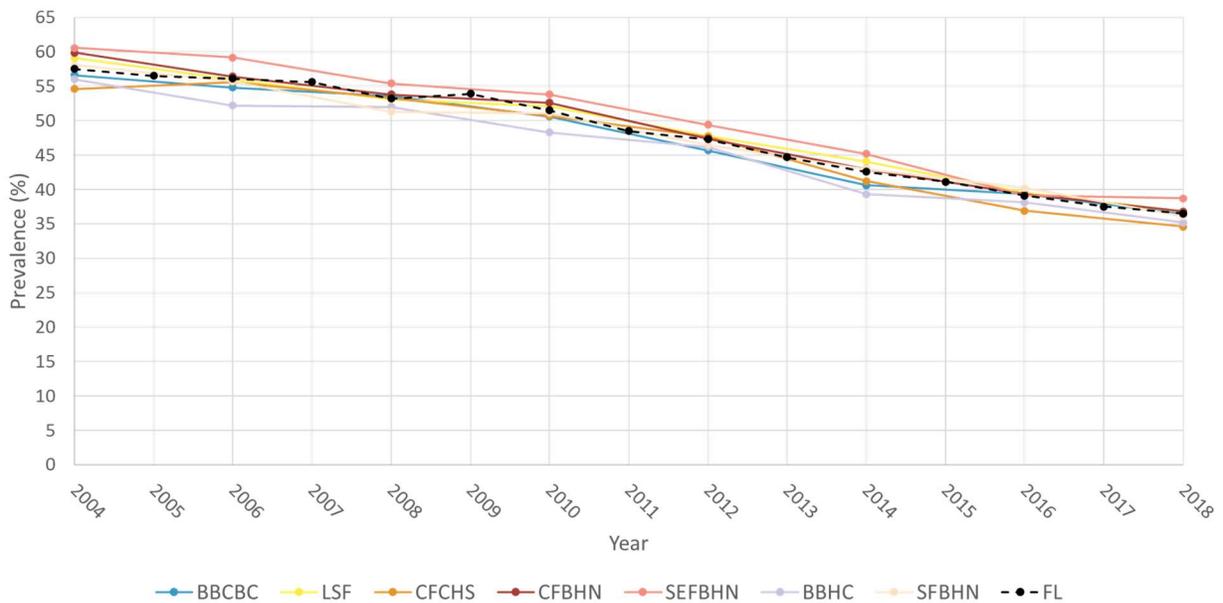


Figure 74. Lifetime Alcohol Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

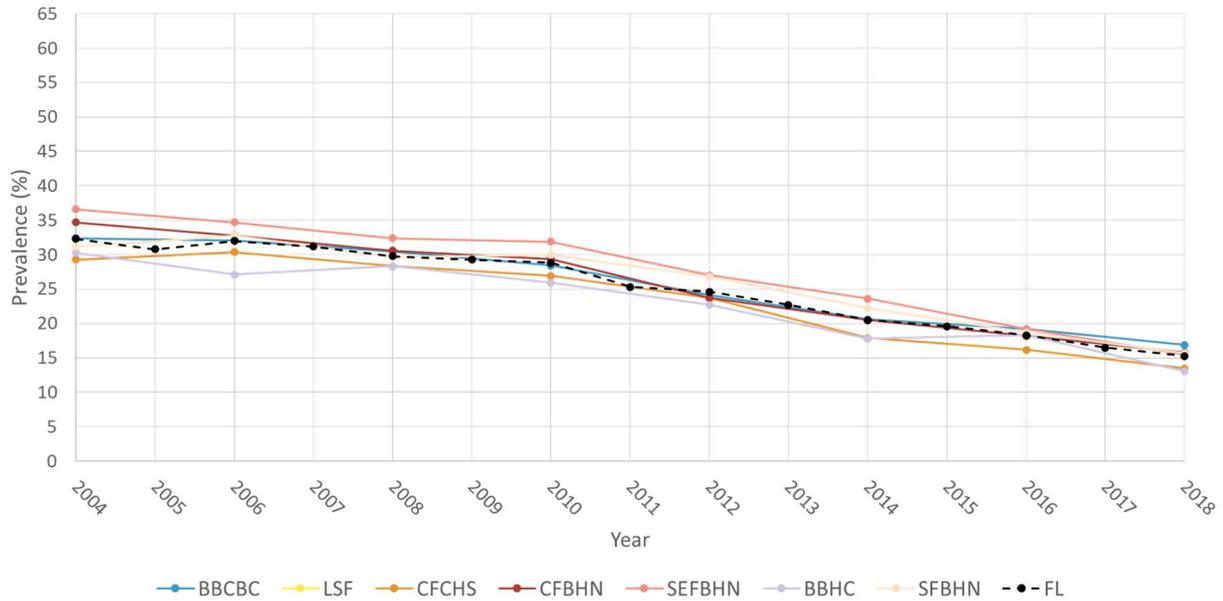


Figure 75. Past Month Alcohol Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

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

Following a more than 50% decline in lifetime use of inhalants among youth in Florida over eleven years (12.2% in 2006 to 5.3% in 2017), the prevalence of lifetime inhalant use has crept back up during the last two years from 5.8% in 2018 to 6.4% in 2019 (Figure 76). A similar trend in past-month use of inhalants among Florida youth was also observed: after a series high of 3.9% in 2006, the prevalence declined to 1.3% in 2017, followed by a two-year increase to 1.9% in 2019. Interestingly, the prevalence for lifetime use of inhalants among youth in the US is higher than among Florida youth, specifically, but Florida youth report a higher prevalence of past-month inhalant use compared to the nation as a whole.

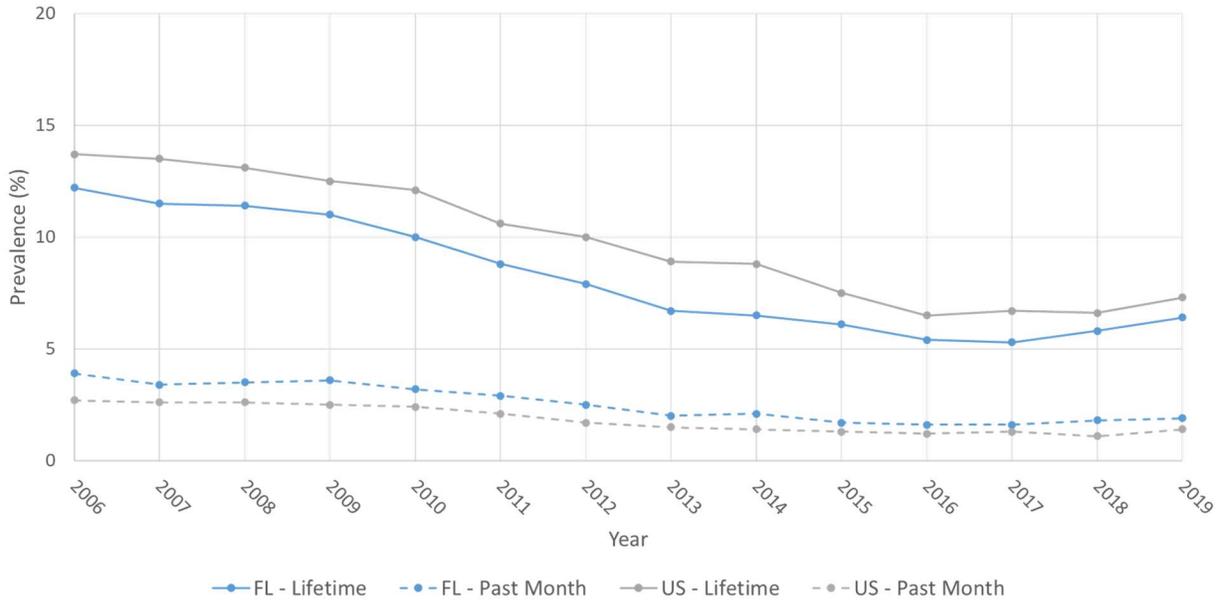


Figure 76. Inhalant Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

Though there was a fair amount of variability in the prevalence of lifetime use of inhalants among Florida’s youth by MER early in the period of observation, the variability has declined in more recent years. Notably, the MER served by Southeast Florida Behavioral Health Network, Inc. is the only region in which inhalant use declined from 2017 to 2018 (Figure 77).

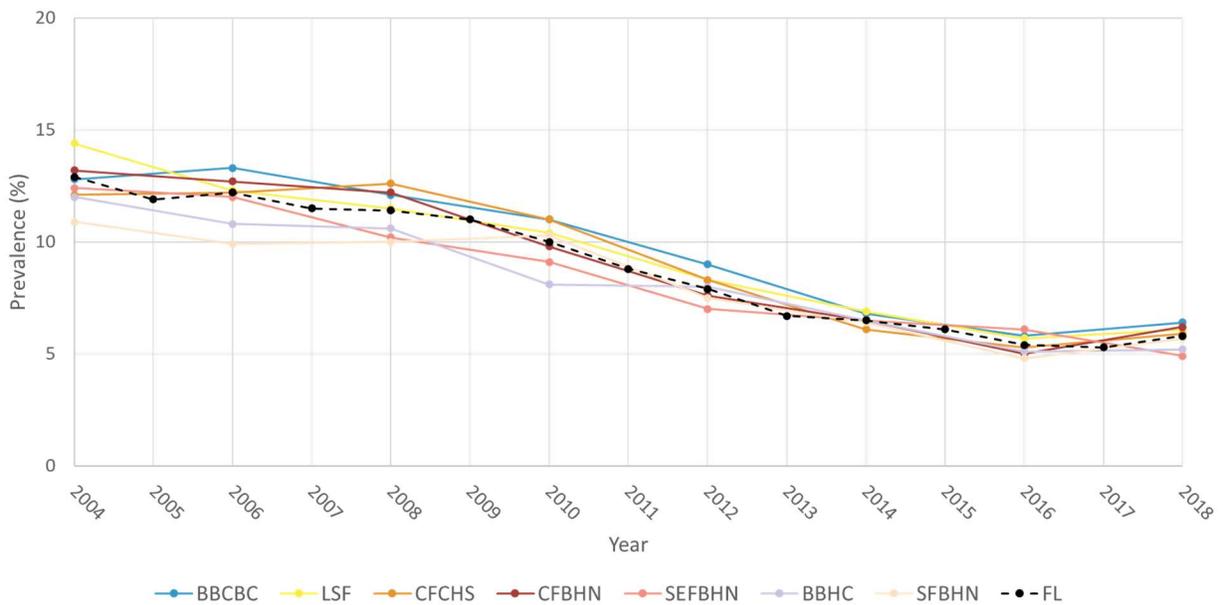


Figure 77. Lifetime Inhalant Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

There is even less variability between the MERs, when examining past-month use of inhalants among Florida’s youth. The prevalence of past-month use increased in all of the MERs from 2017 to 2018 (Figure 78).

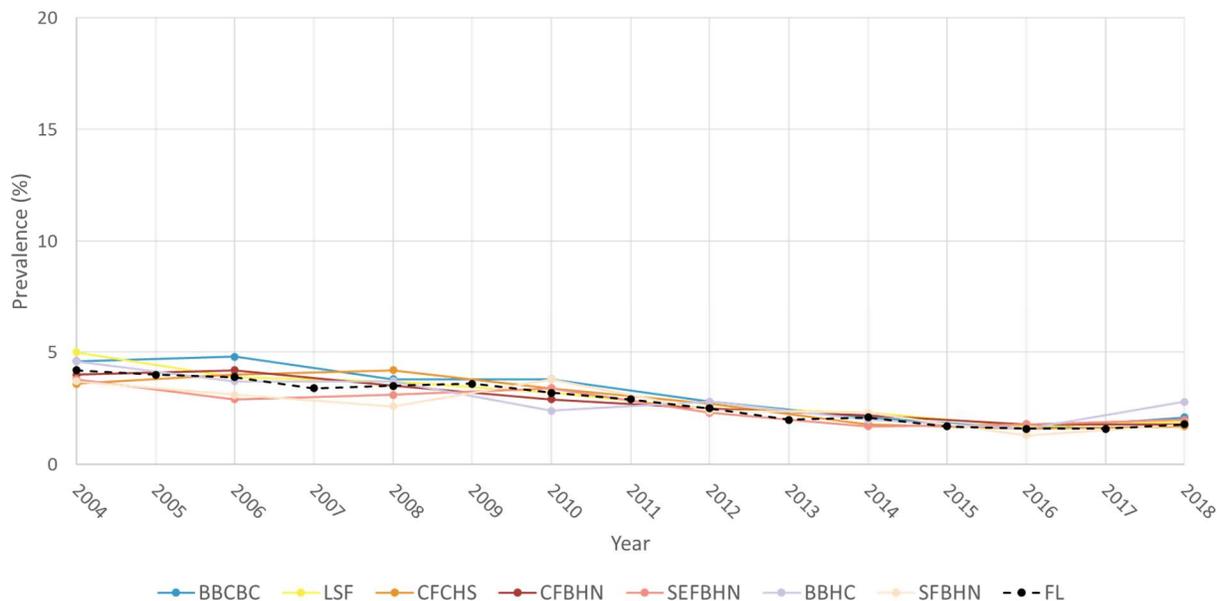


Figure 78. Past-month Inhalant Use among Youth, Florida and Managing Entity Regions, 2004 – 2018. Source: [FYSAS](#).

HALLUCINOGEN USE

A varied group of drugs that can be naturally occurring in plants or synthetic, the collection of drugs known as hallucinogens is comprised of both classic hallucinogens such as LSD and dissociative drugs such as ketamine. Both types of hallucinogens result in sensations and/or images that appear to be real to the person using the drug but are not. Hallucinogens are associated with serious harms both direct - including overdose and substance use disorder – and indirect – due to the changes in mood and perception caused by the use of these drugs.

Hallucinogen Use among Youth

The overall trend in hallucinogen use among youth, both in the US overall and Florida, specifically, is downward (Figure 79). From 2010 to 2018, the prevalence of lifetime use among youth in Florida declined from 3.9% to 2.7% (the lowest prevalence during the period of observation). In the latest year, 2019, the prevalence increased to 3.0%. A similar decline with an increase in the last year was observed for the US overall as well. For past-month use of hallucinogens, the prevalence among youth in Florida also declined from 1.1% in 2010 to 0.8% in 2018 (also previously in 2013) and remained unchanged in 2019. The prevalence of past-month use of hallucinogens in the US saw a similar decline through 2018, followed by a 0.3 percentage point increase in 2019.

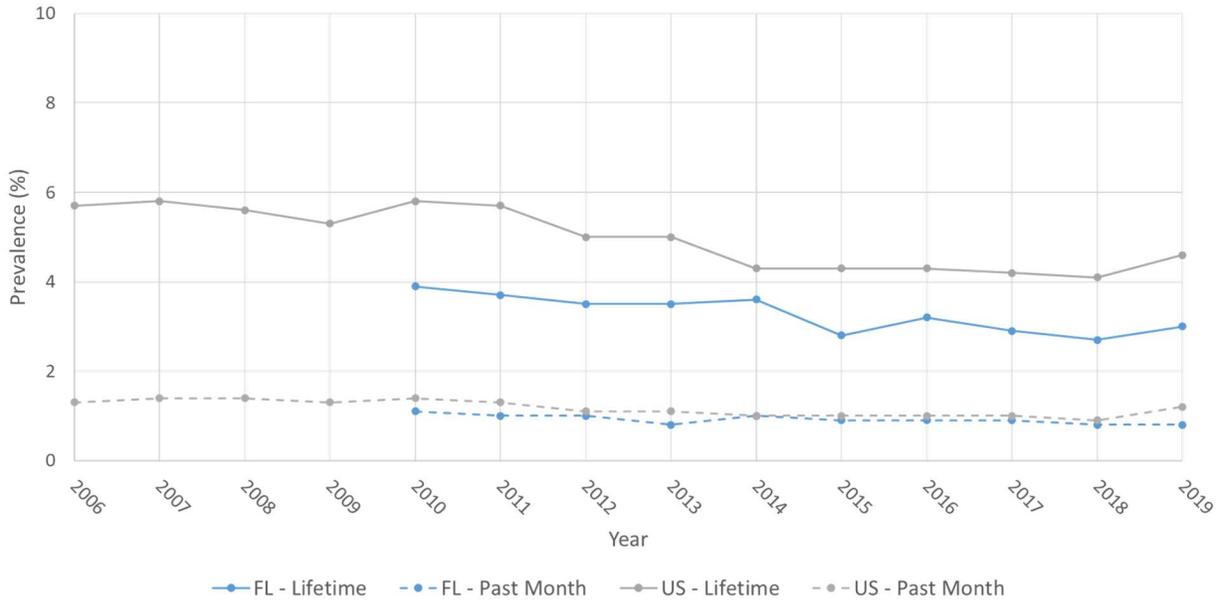


Figure 79. Hallucinogen Use among Youth, Lifetime and Past Month, United States and Florida, 2006 – 2019. Source: [MTF](#) and [FYSAS](#).

There is a fair amount of variability in the prevalence of lifetime use of hallucinogens among youth in Florida (Figure 80).

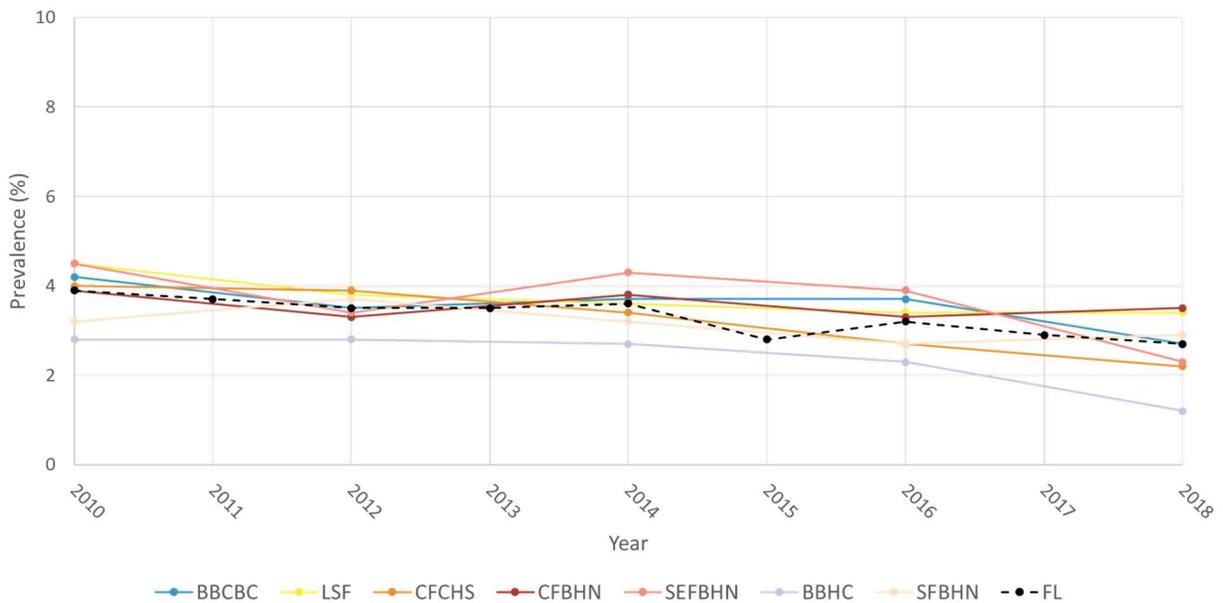


Figure 80. Lifetime Hallucinogen Use among Youth, Florida and Managing Entity Regions, 2010 – 2018. Source: [FYSAS](#).

In the northern part of Florida, the prevalence of lifetime use of hallucinogens among youth remained above or was equal to the prevalence for the state as a whole throughout the period of observation

(Figure 81 and Figure 82). In 2018, the prevalence of lifetime hallucinogen use among youth was the second to highest in the state in the MER served by Lutheran Services Florida at 3.4% (Figure 81).

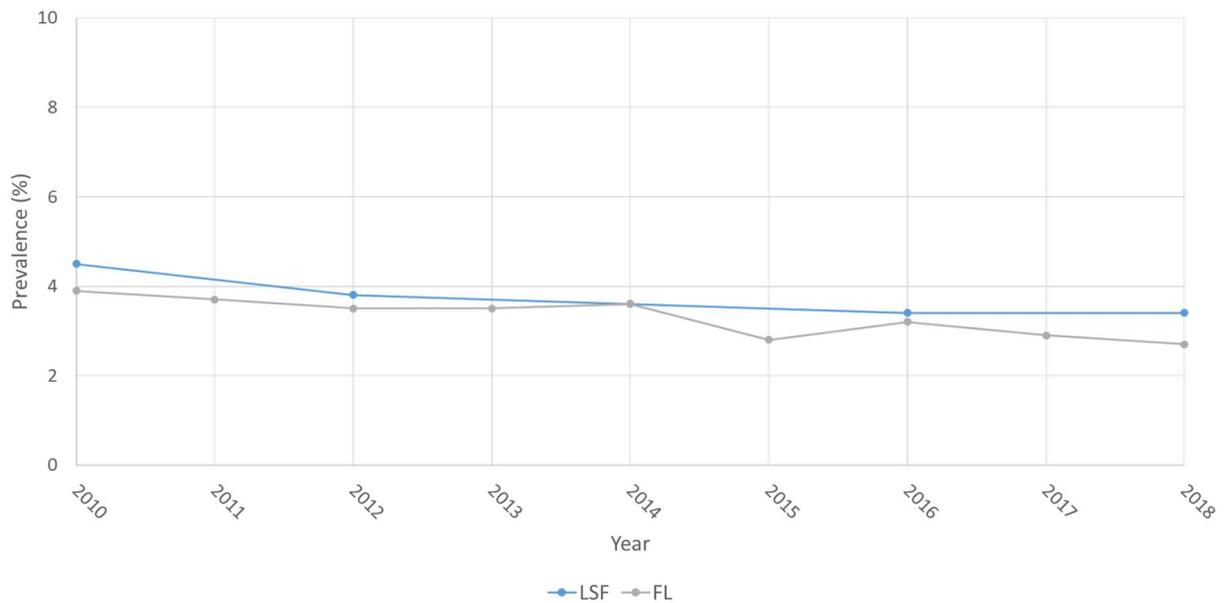


Figure 81. Lifetime Hallucinogen Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018. Source: [FYSAS](#).

The prevalence in the MER served by Big Bend Community Based Care dba NWF Health declined to 2.7%, a prevalence equal to that for the state in 2018 (Figure 82).

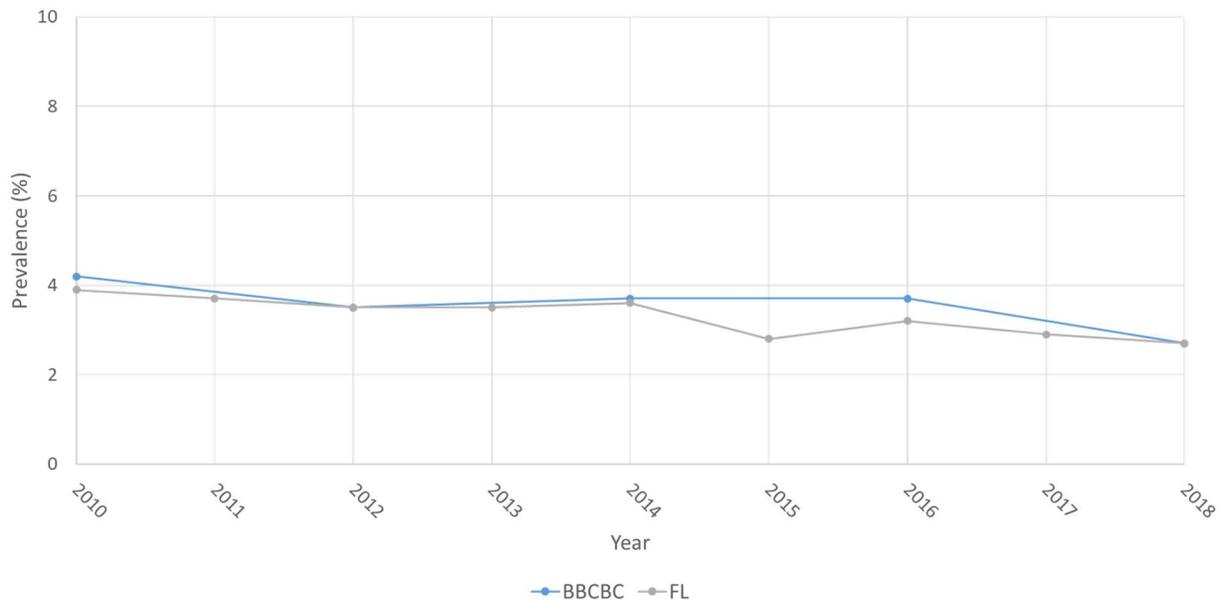


Figure 82. Lifetime Hallucinogen Use among Youth, Florida and Big Bend Community Based Care dba NWF Health, 2010 – 2018. Source: [FYSAS](#).

In four MERs, the MER-specific prevalence rates went both above and below the state prevalence rate during the period of observation (Figures 83 - 86).

Two MERs ended up with prevalence rates above the state rate in 2018 (Figure 83 and Figure 84). In the MER served by the Central Florida Behavioral Health Network, the prevalence of lifetime hallucinogen use among youth increased to the highest MER-specific prevalence in the state of 3.5% in 2018 (Figure 83).

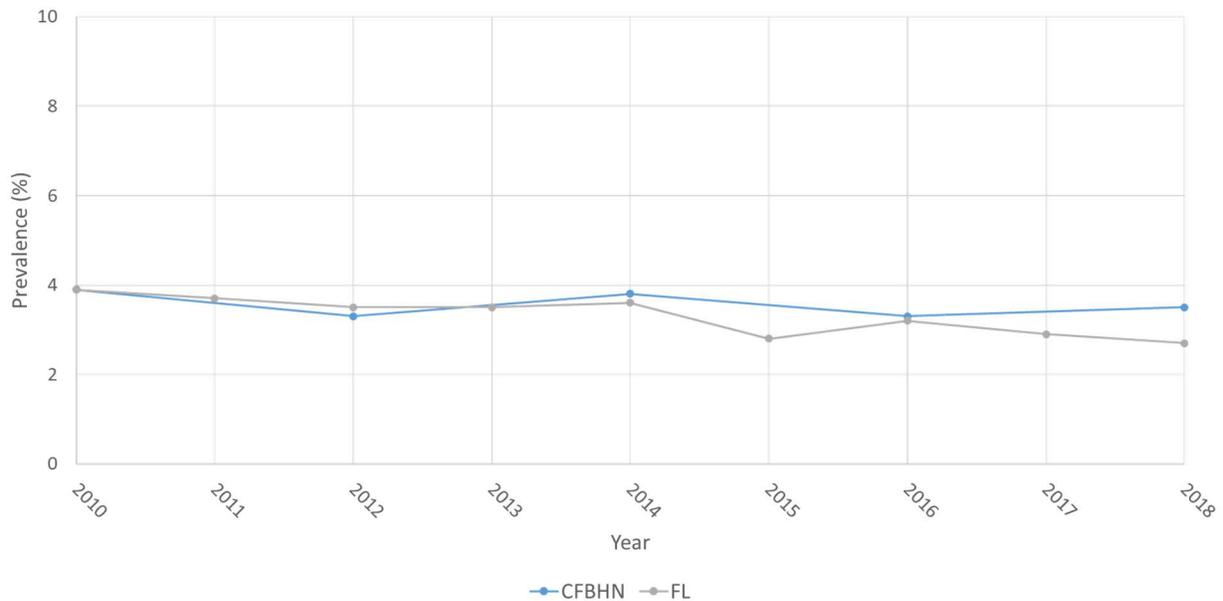


Figure 83. Lifetime Hallucinogen Use among Youth, Florida and Central Florida Behavioral Health Network, 2010 – 2018. Source: [FYSAS](#).

The prevalence of lifetime hallucinogen use among youth also increased in the MER served by South Florida Behavioral Health Network, Inc. dba Thriving Mind to 2.9% (Figure 84).

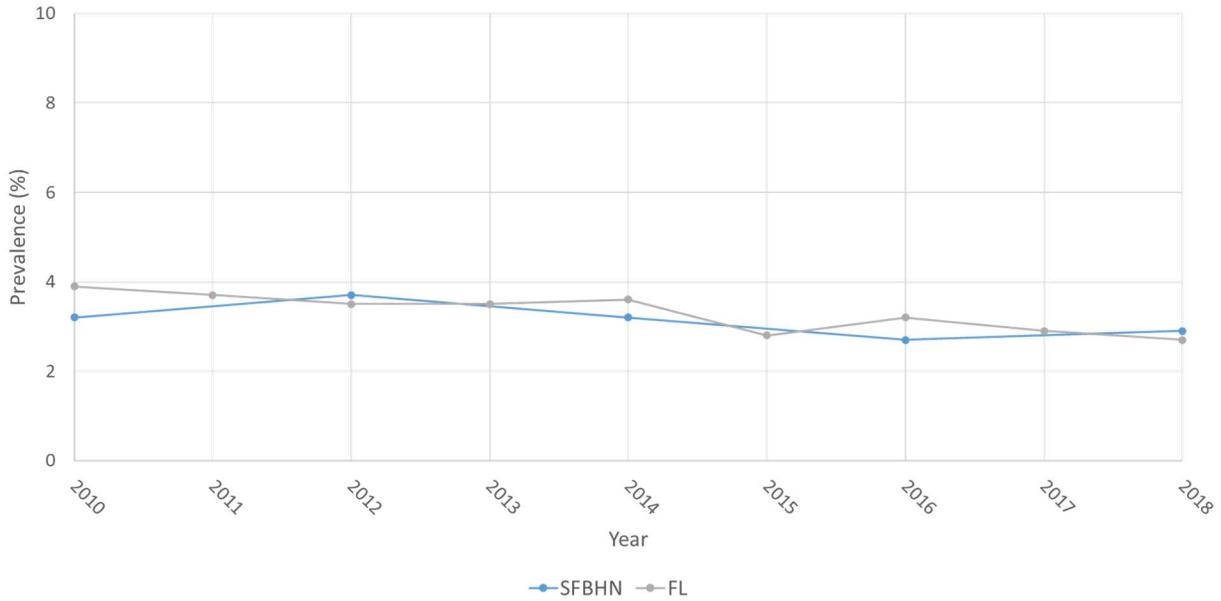


Figure 84. Lifetime Hallucinogen Use among Youth, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2010 – 2018. Source: [FYSAS](#).

Conversely, two MERs ended up with prevalence rates below those for the state overall in 2018 (Figure 85 and Figure 86). In the MER served by the Central Florida Cares Health System, the prevalence of lifetime hallucinogen use among youth in the region has steadily declined, dipping below the state prevalence rate for the last three years for which regional data are available, ending at 2.2% in 2018 (Figure 85).

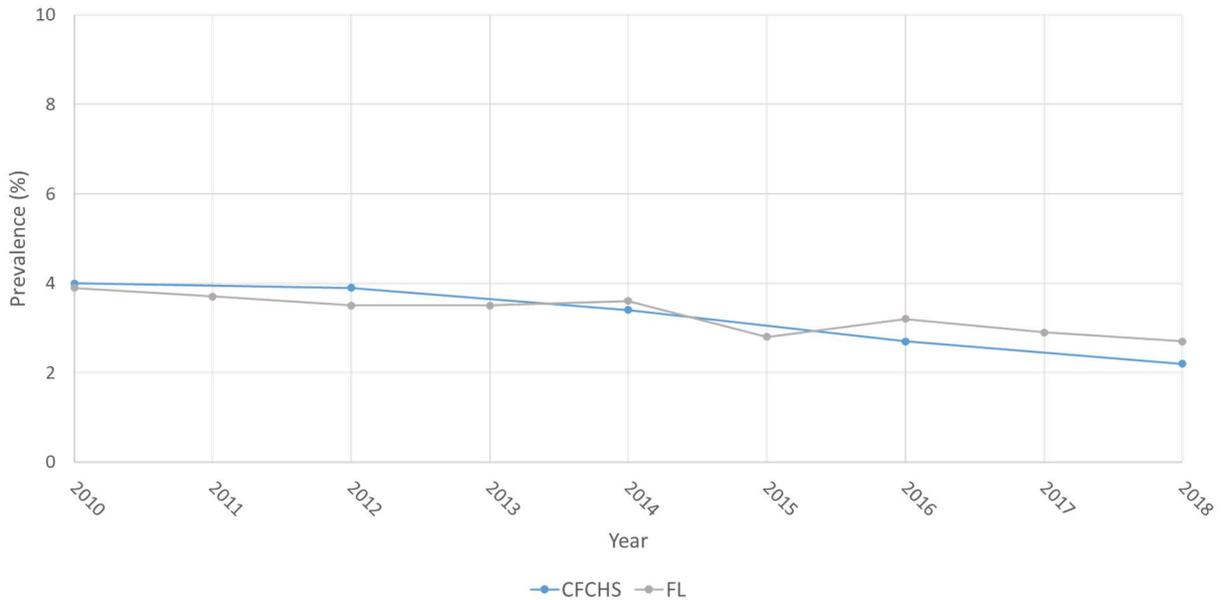


Figure 85. Lifetime Hallucinogen Use among Youth, Florida and Central Florida Cares Health System, 2010 – 2018. Source: [FYSAS](#).

In the region served by Southeast Florida Behavioral Health Network, Inc., the prevalence of lifetime hallucinogen use has also declined in recent years to 2.3% (Figure 86)

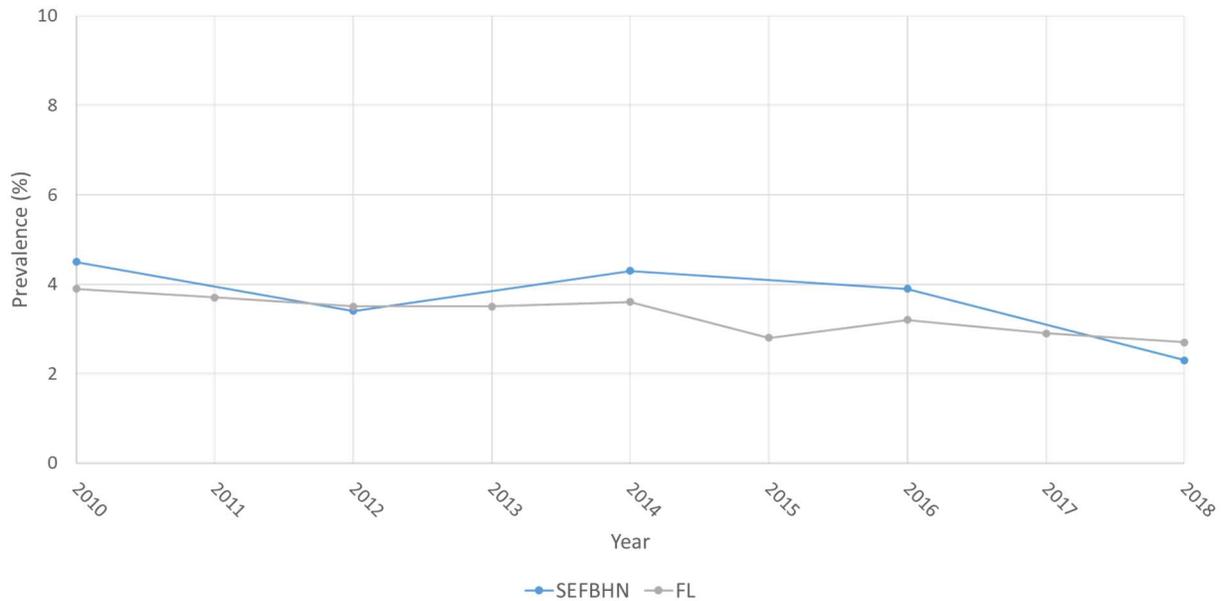


Figure 86. Lifetime Hallucinogen Use among Youth, Florida and Southeast Florida Behavioral Health Network, Inc., 2010 – 2018. Source: [FYSAS](#).

The only MER to have prevalence rates for lifetime hallucinogen use among youth below that of the state as a whole throughout the reporting period was Broward County, which had a prevalence of only 1.2% in 2018 (Figure 87).

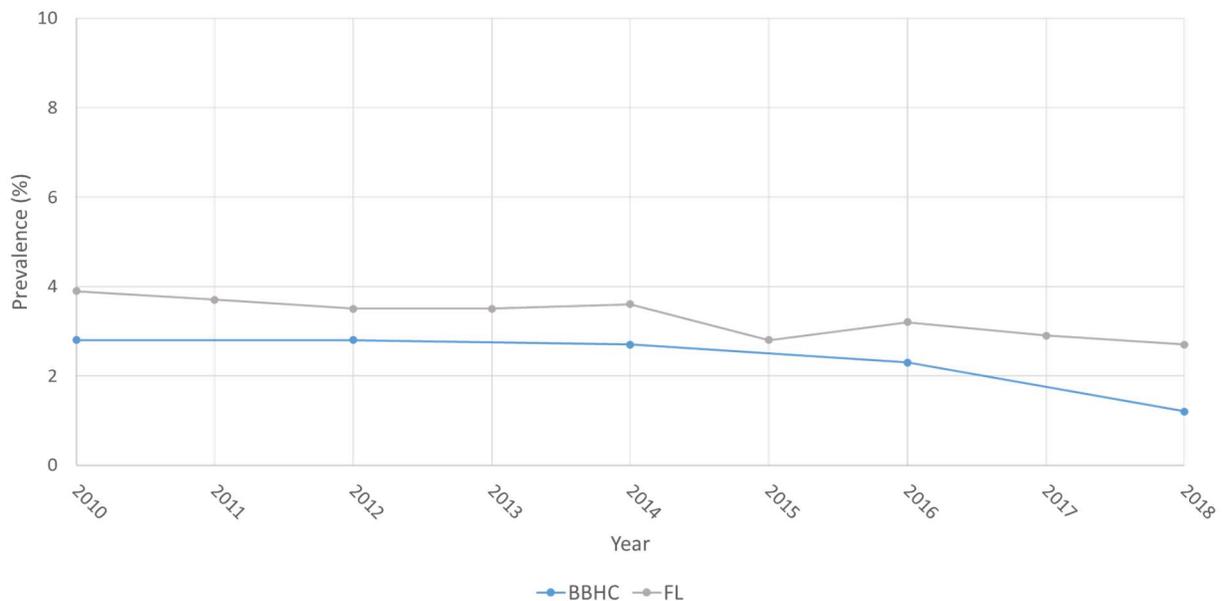


Figure 87. Lifetime Hallucinogen Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018. Source: [FYSAS](#).

Less variability in the prevalence of past-month hallucinogen use was observed among the MERs for most of the time period observed, though changes from 2017 to 2018 differed somewhat: the prevalence increased in two MERs (those served by Central Florida Behavioral Health Network, Inc. and South Florida Behavioral Health Network, Inc. dba Thriving Mind), remained the same in one MER (the one served by Lutheran Services Florida), and declined in the remaining four MERs (those served by Central Florida Cares Health System, Southeast Florida Behavioral Health Network, Inc., Big Bend Community Based Case dba NWF Health, and the Broward Behavioral Health Coalition) (Figure 88).

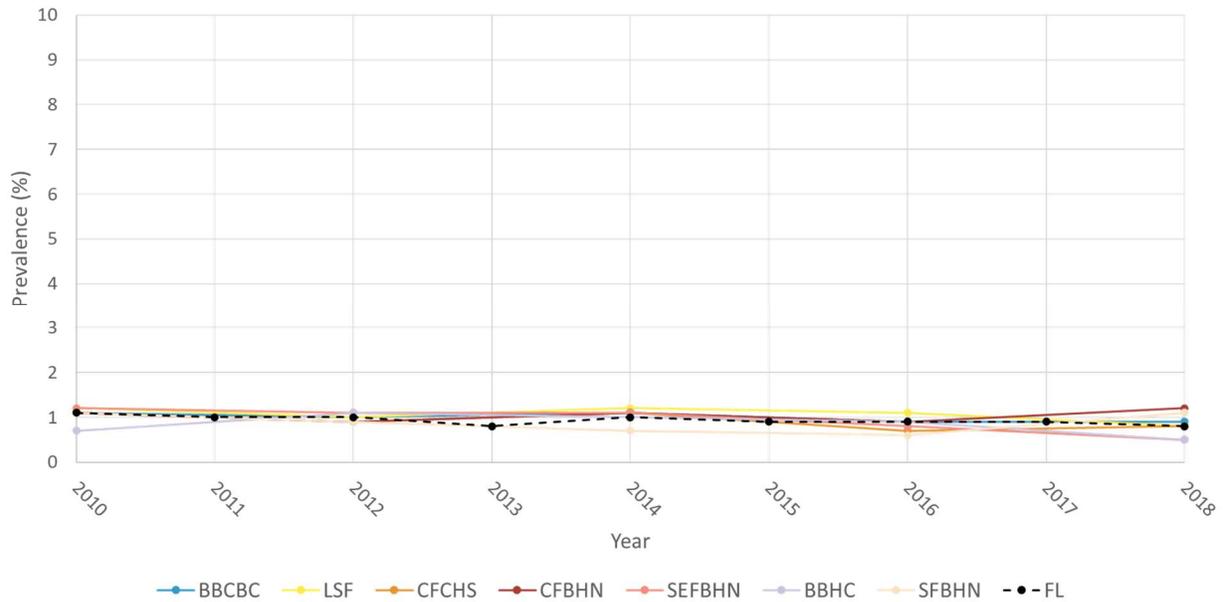


Figure 88. Past Month Hallucinogen Use among Youth, Florida and Managing Entity Regions, 2010 – 2018. Source: [FYSAS](#).

CLUB DRUG USE

Club drugs earned their moniker 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

The prevalence of lifetime use of club drugs among youth has tracked closely to that of the state for the panhandle, northeast and north central Florida, and most of the remaining west coast of the state, ending the period just above Florida overall in the MER served by Big Bend Community Based Care (BBCBC) dba NWF Health, Lutheran Services Florida, and the Central Florida Behavioral Health Network, Inc. ended the period just above Florida overall (Figures 90 – 92).

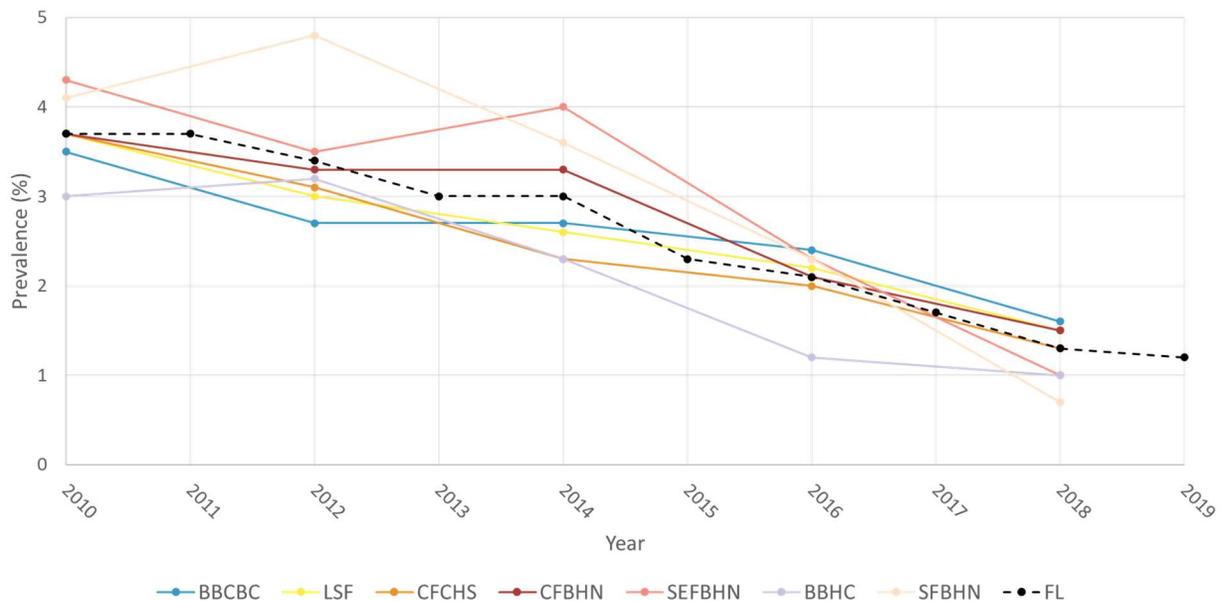


Figure 89. Lifetime Club Drug Use among Youth, Florida and Managing Entity Regions, 2010 – 2019. Source: [FYSAS](#).

Though the prevalence of lifetime use of club drugs among youth was lower in the panhandle than the state overall early in the period of observation, it has declined more slowly, resulting in a higher prevalence in the past two years for which regional data are available (Figure 90). The prevalence in the MER served by BBCBC dba NWF Health was 1.6% in the region, compared to 1.3% statewide in 2018.

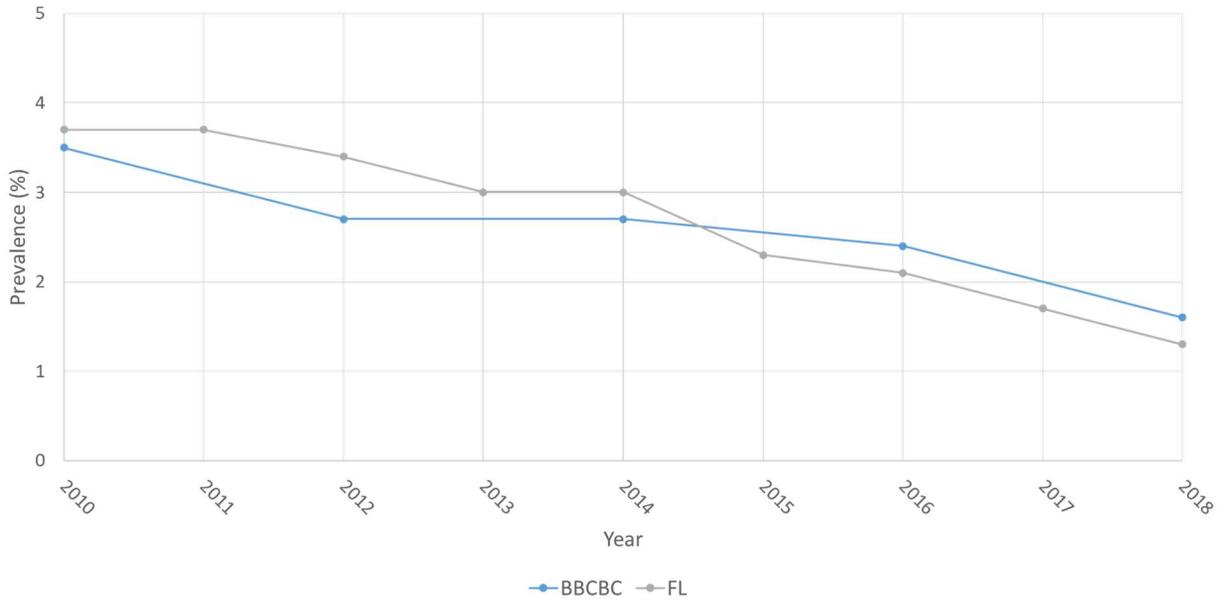


Figure 90. Lifetime Club Drug Use among Youth, Florida and Big Bend Community Based Care dba NWF Health, 2010 – 2018. Source: [FYSAS](#).

A similar pattern was observed in the region served by Lutheran Services Florida (LSF), though the regional and state prevalence rates of lifetime use of club drugs among youth were closer to one another compared to the MER served by BBCBC dba NW Health and FL (Figure 91). The prevalence of lifetime use of club drugs among youth in the MER served by LSF was 1.5% in 2018.

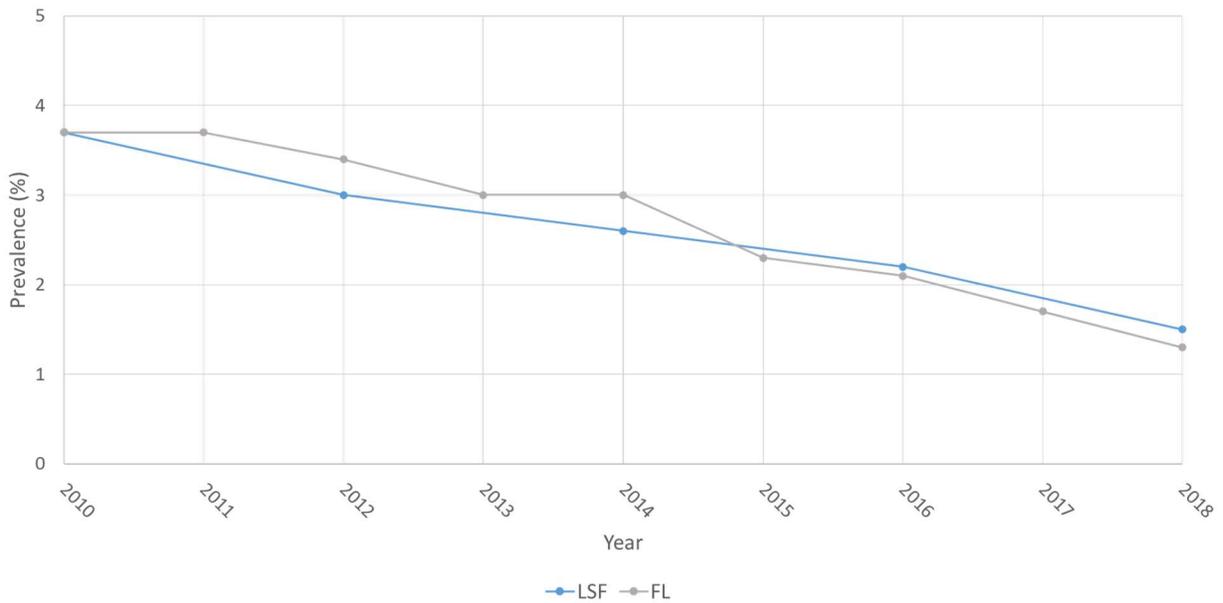


Figure 91. Lifetime Club Drug Use among Youth, Florida and Lutheran Services Florida, 2010 – 2018. Source: [FYSAS](#).

The prevalence of lifetime use of club drugs among youth shifted up and down relative to the overall prevalence in Florida more in the MER served by Central Florida Behavioral Health Network, Inc. (compared to BBCBC and LSF) but also ended above that of the state in 2018, with a prevalence of 1.5% as well (Figure 92).

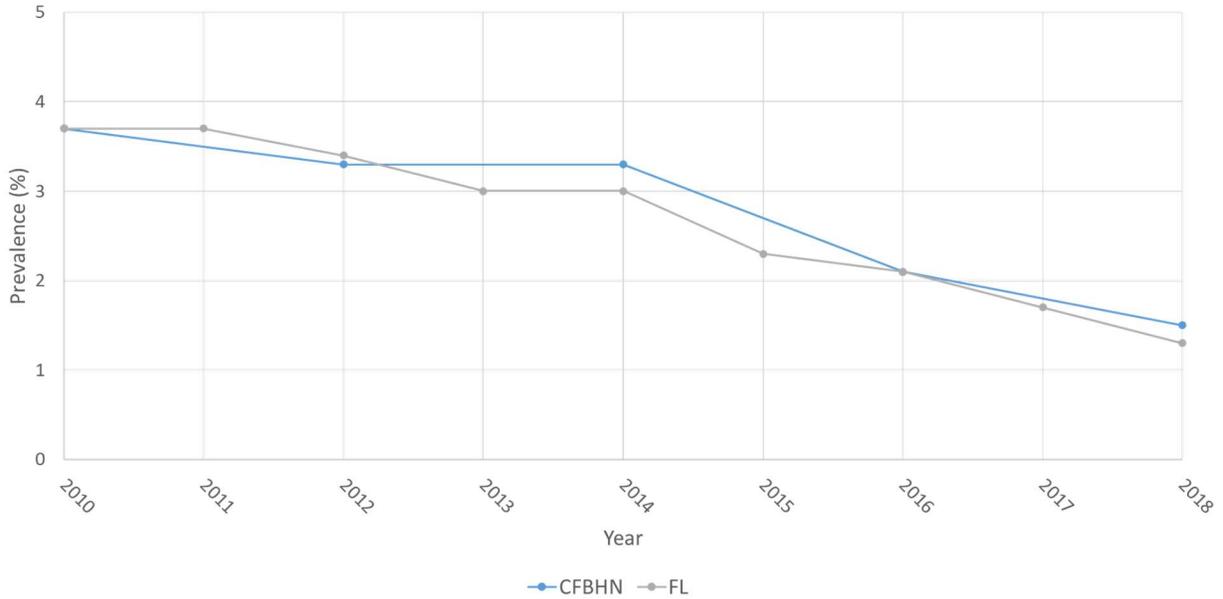


Figure 92. Lifetime Club Drug Use among Youth, Florida and Central Florida Behavioral Health Network, Inc., 2010 – 2018. Source: [FYSAS](#).

While the MERs served by Southeast Florida Behavioral Health Network (SEFBHN) and South Florida Behavioral Health Network, Inc. (SFBHN) dba Thriving Mind had the two highest prevalence rates of lifetime use of club drugs among youth in the state early in the period of observation, both declined markedly, resulting in the two lowest prevalence rates in the state in 2018 (Figure 93 and Figure 94). The prevalence of lifetime use of club drugs among youth in the region served by SEFBHN was 1%, the second lowest rate in the state (equal to that of Broward County, Figure 96) (Figure 93).

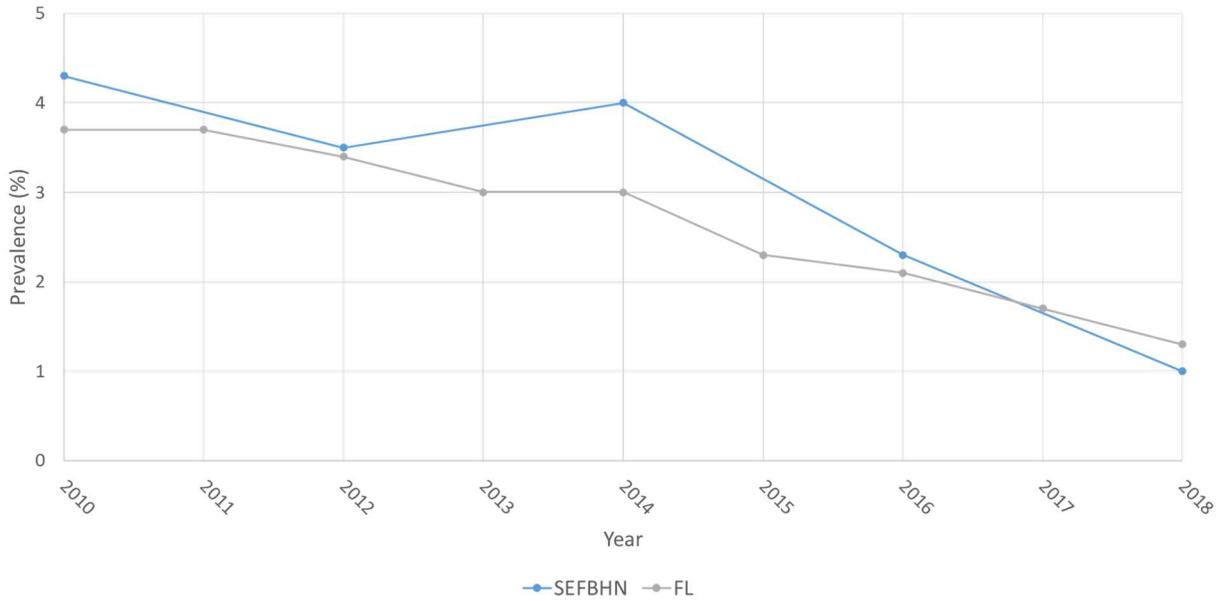


Figure 93. Lifetime Club Drug Use among Youth, Florida and Southeast Florida Behavioral Health Network, 2010 – 2018. Source: [FYSAS](#).

The prevalence of lifetime use of club drugs among youth in the MER served by SFBHN dba Thriving Mind declined to the lowest regional prevalence rate in the state, 0.7%, in 2018 (Figure 94)

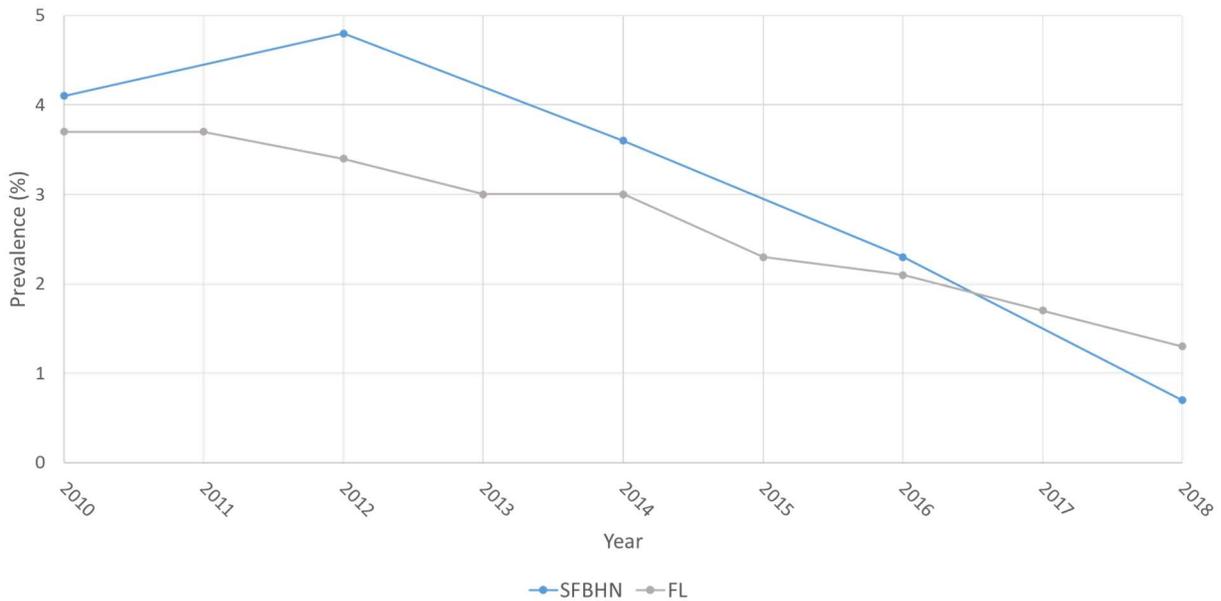


Figure 94. Lifetime Club Drug Use among Youth, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2010 – 2018. Source: [FYSAS](#).

In the MER served by the Central Florida Cares Health System, the prevalence of lifetime use of club drugs among youth has been equal to or lower than the prevalence statewide throughout the period of observation, ending at 1.3% in 2018 (Figure 95).

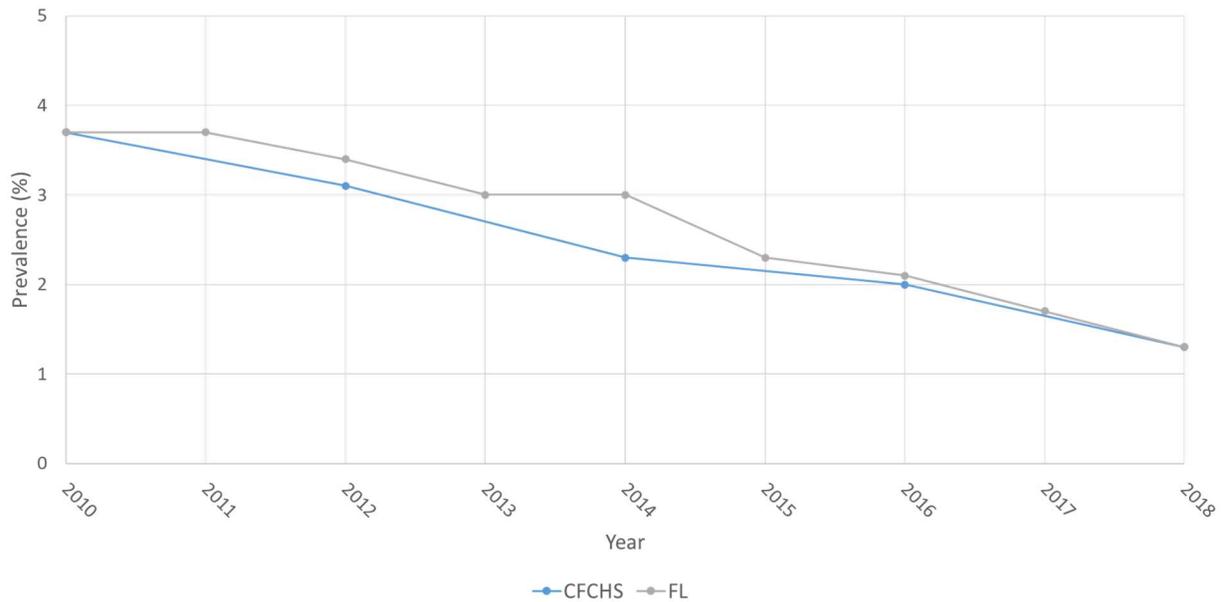


Figure 95. Lifetime Club Drugs Use among Youth, Florida and Central Florida Cares Health System, 2010 – 2018. Source: [FYSAS](#).

The only MER in which the lifetime prevalence of club drugs among youth remained below the prevalence rate for the state was Broward County, with 1% of youth endorsing ever using club drugs (Figure 96).

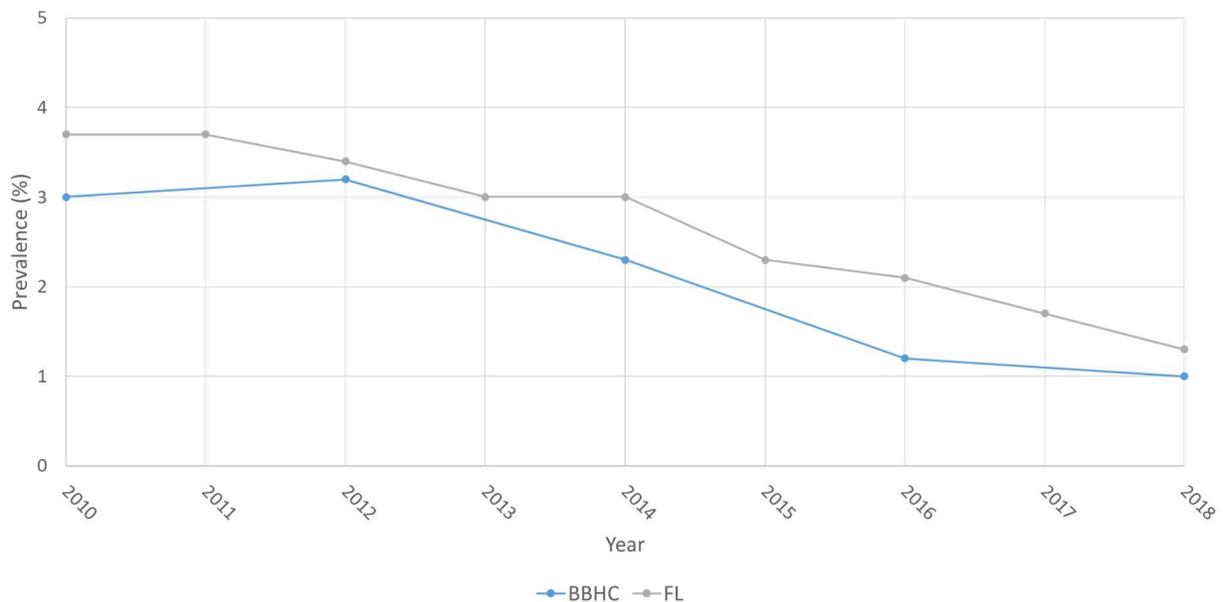


Figure 96. Lifetime Club Drugs Use among Youth, Florida and Broward Behavioral Health Coalition, 2010 – 2018. Source: [FYSAS](#).

Though substance use, particularly prescription medications, may result in positive outcomes, there are myriad 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. As represented in the *Injury Pyramid for Substance Use* (Figure 1), only a portion of those who use substances will experience these negative consequences, which can both directly and in-directly contribute to poor health outcomes, potentially resulting in long-term health disparities.

ARRESTS AND CITATIONS

Based on annual uniform crime reports for Florida, arrests in general have been steadily declining since 2008 (Figure 97), with a fair amount of variability between MERs (Figure 97).

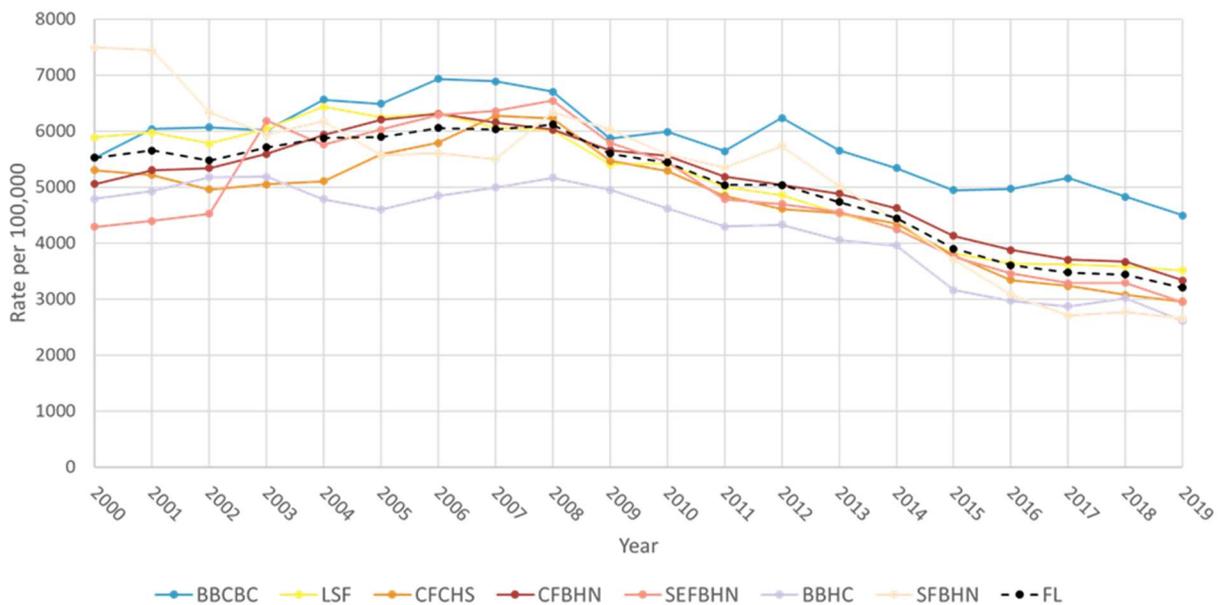


Figure 97. Total Arrests, Florida and Managing Entity Regions, 2000 – 2019. Source: [FDLE Annual UCR](#).

Drug arrests have comprised anywhere from 13.3% (in 2012) to 18.8% (in 2018) of all arrests, during the twenty-year time period covered in this report (Figure 97 and Figure 98). Note that the values of the y-axis are the same for Figure 97 and Figure 98, to show the proportion of all arrests that drug arrests comprise.

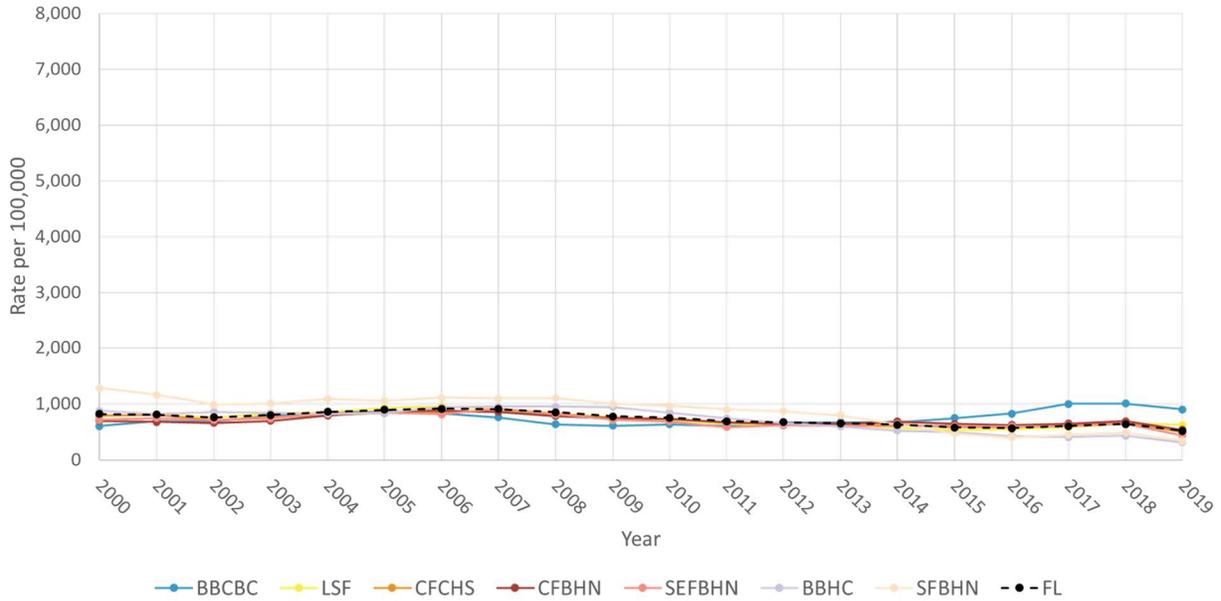


Figure 98. Drug Arrests, Florida and Managing Entity Regions, 2000 – 2019. Source: [FDLE Annual UCR](#).

Drug Arrests

Similar to arrests overall, there has also been variability in drug arrests by MER (Figure 99). Note that data presented in Figure 99 are the same data presented in Figure 98, but the scale of the y-axis is different. Overall, drug arrests declined beginning in 2006 until 2016, after which arrests increased for two years, followed by a decline statewide, and in every MER, from 2018 to 2019 (Figures 99 – 106).

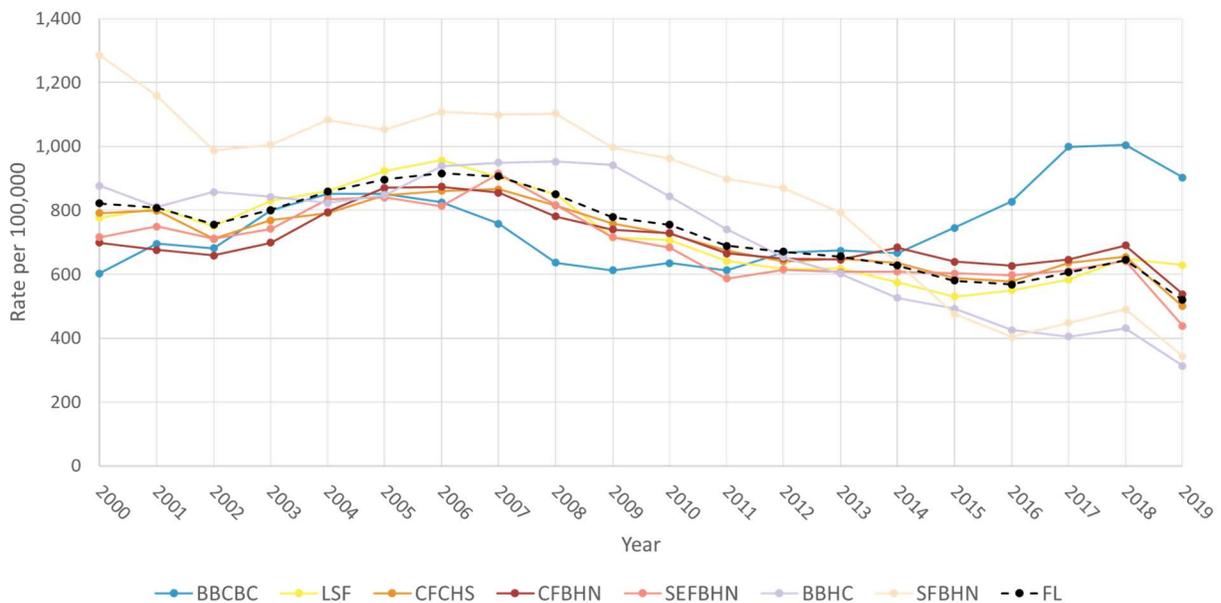


Figure 99. Drug Arrests, Florida and Managing Entity Regions, 2000 – 2019. Source: [FDLE Annual UCR](#).

Though the rate of drug arrests in the MER served by Big Bend Community Based Care dba NWF Health largely remained below statewide rates early in the period of observation, the rates saw a marked increase beginning in 2014, ending with a rate of 903 drug arrests per 100,00 population in 2019 compared to 519 drug arrests per 100,000 population in Florida overall that year (Figure 100).

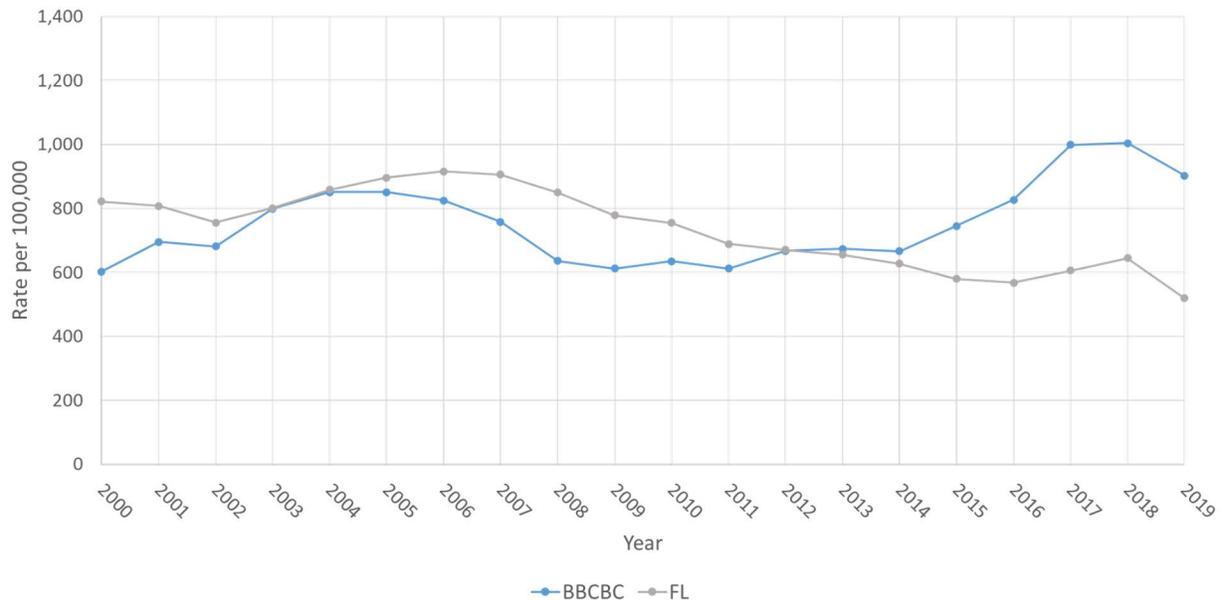


Figure 100. Drug Arrests, Florida and Big Bend Community Based Care dba NWF Health, 2000 – 2019. Source: [FDLE Annual UCR](#).

Rates of drug arrest in northeast, north central, central, and as far south as the sun coast and southeast Florida, all tracked closely to those of the state overall (Figures 101 – 104). Rates of drug arrest in the MER served by Lutheran Services Florida tracked closely with the state overall, but declined more slowly from 2018 to 2019, when the rate was 629 drug arrests per 100,000 population (Figure 101).

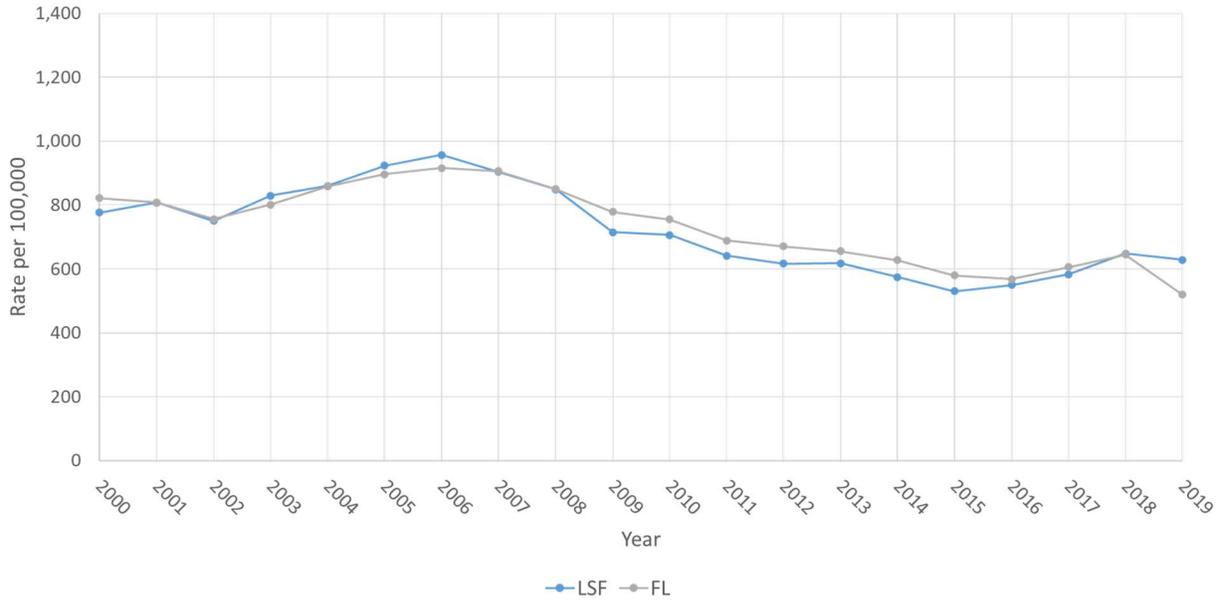


Figure 101. Drug Arrests, Florida and Lutheran Services Florida, 2000 – 2019. Source: [FDLE Annual UCR](#).

Drug arrest rates in the MER served by the Central Florida Cares Health System mimicked the statewide trend, ending with a rate just below the state in 2019, 500 drug arrests per 100,000 population (Figure 102).

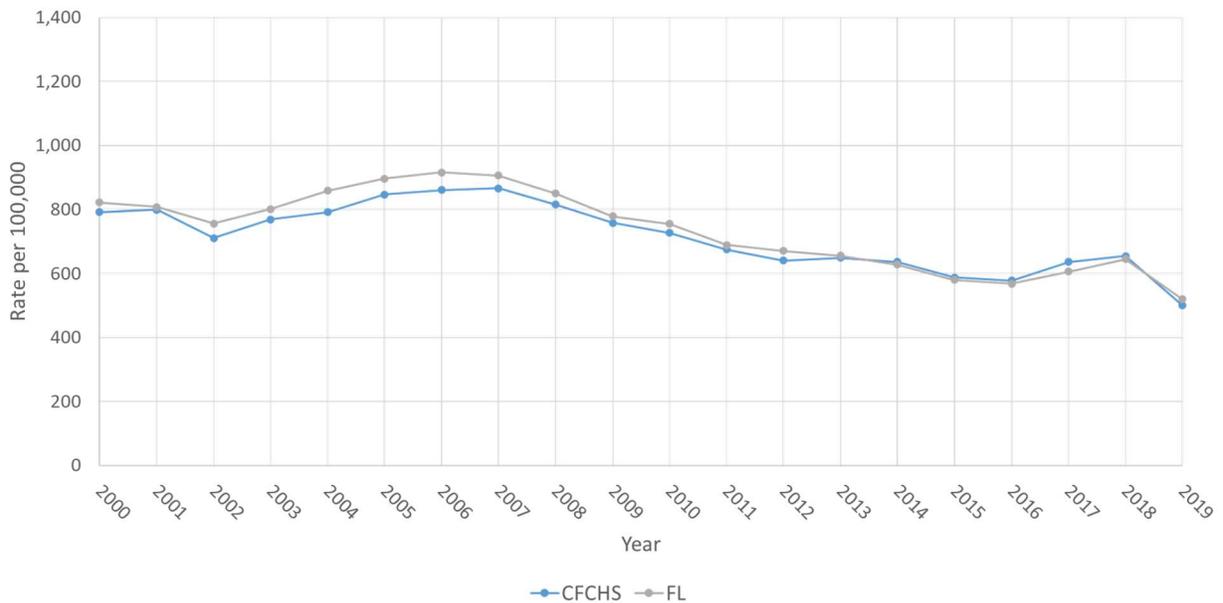


Figure 102. Drug Arrests, Florida and Central Florida Cares Health System, 2000 – 2019. Source: [FDLE Annual UCR](#).

Similarly, MER-specific rates in the region served by Central Florida Behavioral Health Network, Inc. followed nearly the same trend as the state overall, ending with a rate of 538 per 100,000 population, just above that for Florida as a whole (Figure 103).

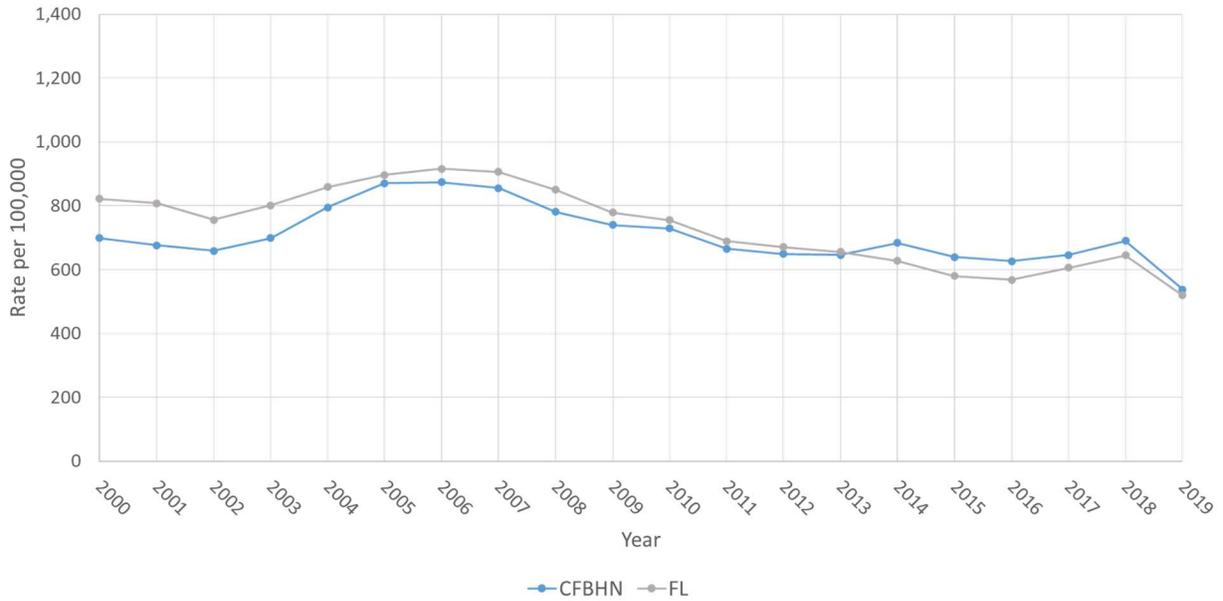


Figure 103. Drug Arrests, Florida and Central Florida Behavioral Health Network, Inc., 2000 – 2019. Source: [FDLE Annual UCR](#).

Likewise, the pattern observed in rates of drug arrest in the MER served by the Southeast Florida Behavioral Health Network have been similar to those for the state as a whole, though declining faster from 2018 to a rate of 439 drug arrests per 100,000 population in 2019 (Figure 104).

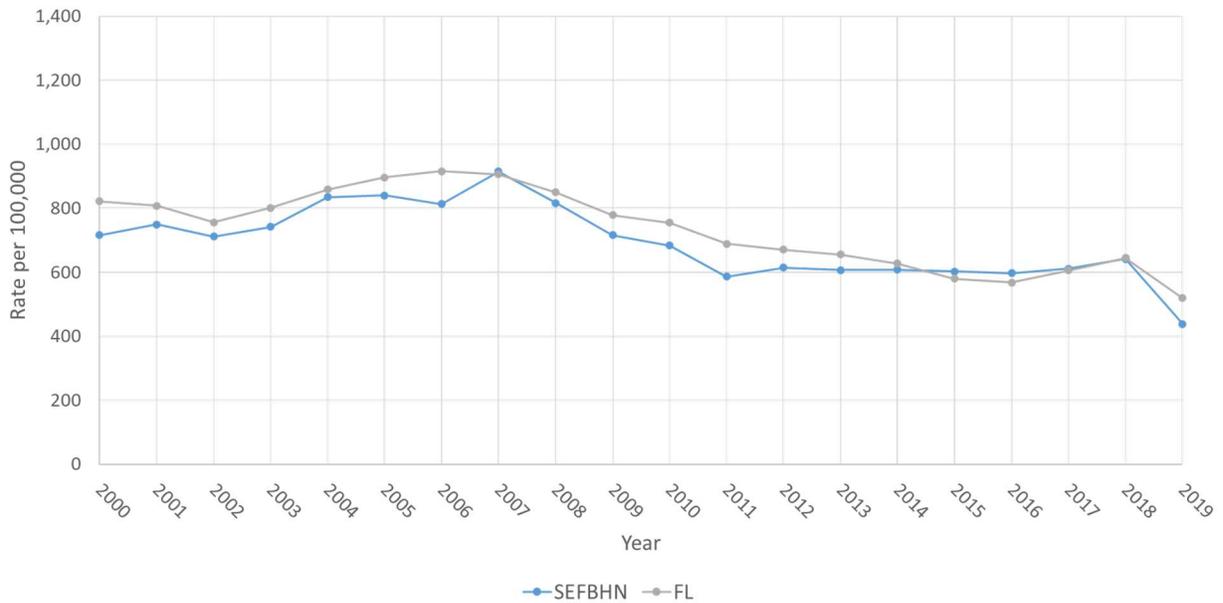


Figure 104. Drug Arrests, Florida and Southeast Florida Behavioral Health Network, 2000 – 2019. Source: [FDLE Annual UCR](#).

In the southernmost part of the state, the MER-specific trends differed somewhat from the state as a whole. Rates declined for these MERs served by BBHC and SFBHN and fell below the state overall for several of the latest years (Figure 105 and Figure 106). In spite of rates of drug arrest above the state overall for most of the period of observation, rates declined in the MER served by South Florida Behavioral Health Network, Inc. dba Thriving Mind in recent years, resulting in MER-specific rates below that of the state overall (Figure 105). In 2019, the rate of drug arrest declined to 344 drug arrests per 100,000 population in this southernmost MER.

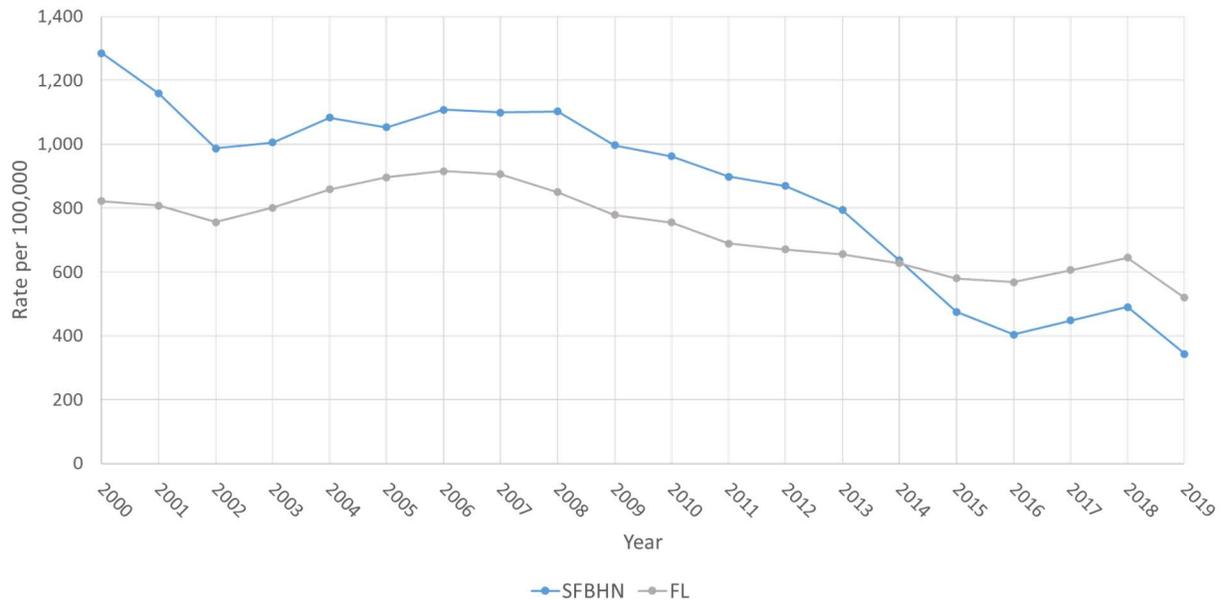


Figure 105. Drug Arrests, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2000 – 2019. Source: [FDLE Annual UCR](#).

In Broward County, rates of drug arrest tracked more closely with those of the state overall than the MER served by South Florida Behavioral Health Network, Inc. dba Thriving Mind and then began much earlier, resulting in the lowest rate of drug arrest in the state in 2019, 314 drug arrests per 100,000 (Figure 106).

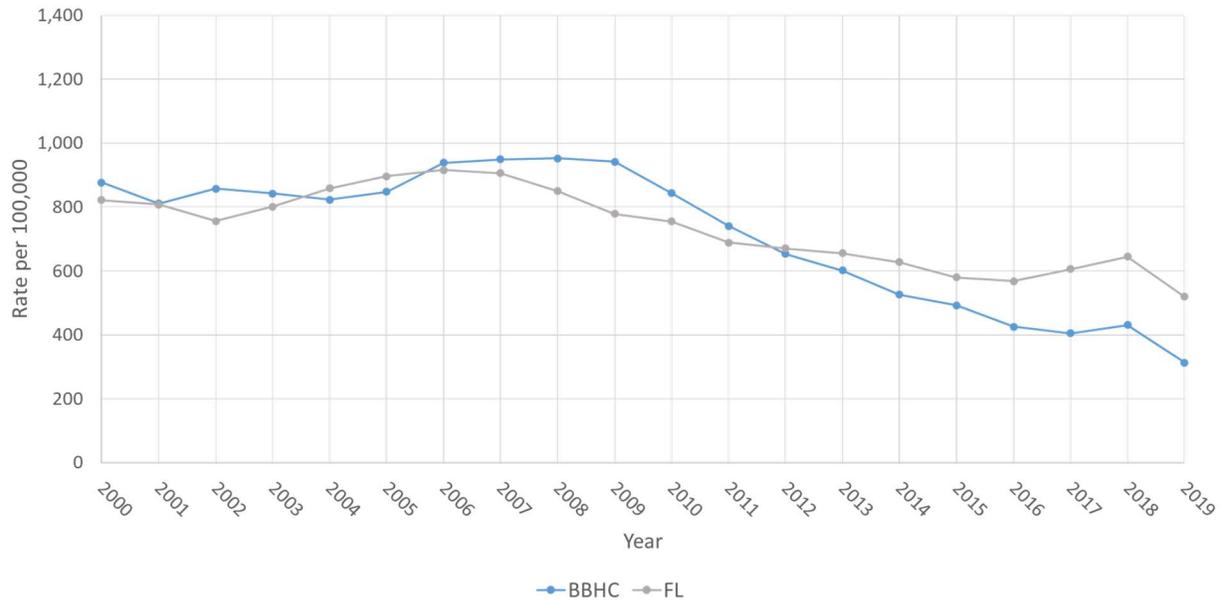


Figure 106. Drug Arrests, Florida and Broward Behavioral Health Coalition, 2000 – 2019.

Source: [FDLE Annual UCR](#).

Citations for Driving Under the Influence of Alcohol

Though alcohol can be consumed legally in the United States by adults 21 years of age and older, there are limits to its legal use. In addition, use of alcohol has myriad risks associated with it, including citation for driving under the influence of alcohol (DUI), due to increased risk of motor vehicle crash. Citations for DUI have been steadily declining over time, from 294 citations per 100,000 population in 2011 to 212 citations per 100,000 in 2019 (Figure 107). There is variability in the MER-specific rates of DUI citation, though most MERs have experienced a similar steady decline in rates of citation over the period of observation (Figures 107 – 114).

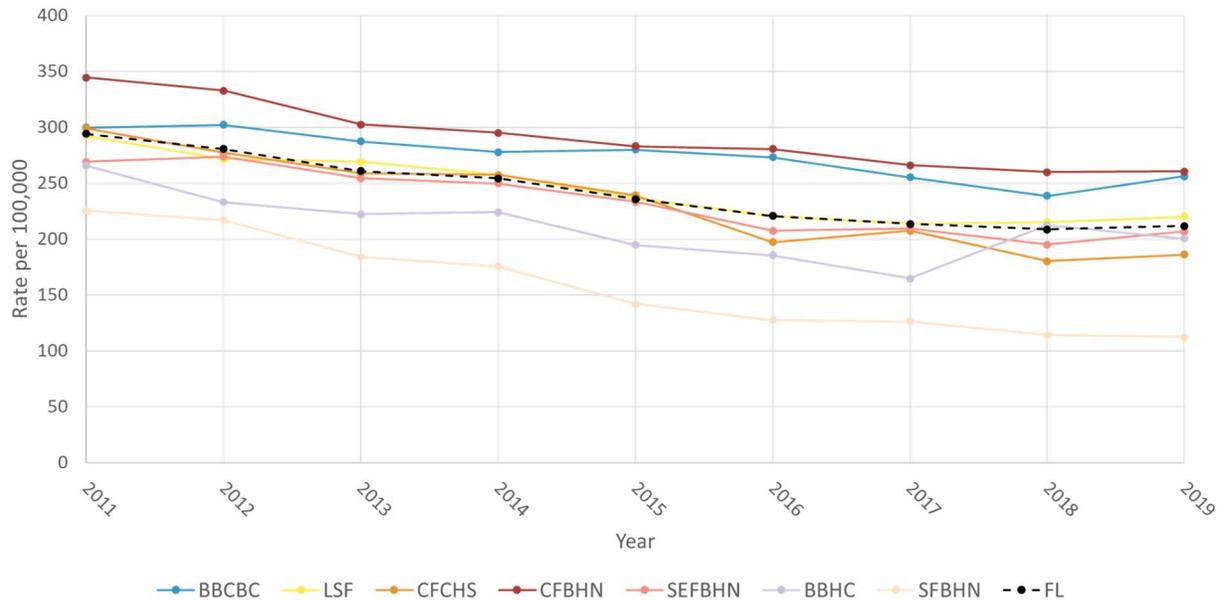


Figure 107. DUI Citations, Florida and Managing Entity Regions, 2011 – 2019. Source: [FLHSMV](#).

Two MERs – those served by Central Florida Behavioral Health Network, Inc. (CFBHN) and Big Bend Community Based Care (BBCBC) dba NWF Health – have rates of citation for DUI consistently above the overall rate for the state (Figure 108 and Figure 109). In the MER served by CFBHN, the rate of citation for DUI has ranged from 41 to 60 citations per 100,000 population over and above the rate for Florida as a whole (Figure 108). However, the trend over time has been a similar downward trend, resulting in a series low rate of 260 citations for DUI per 100,000 population in 2019.

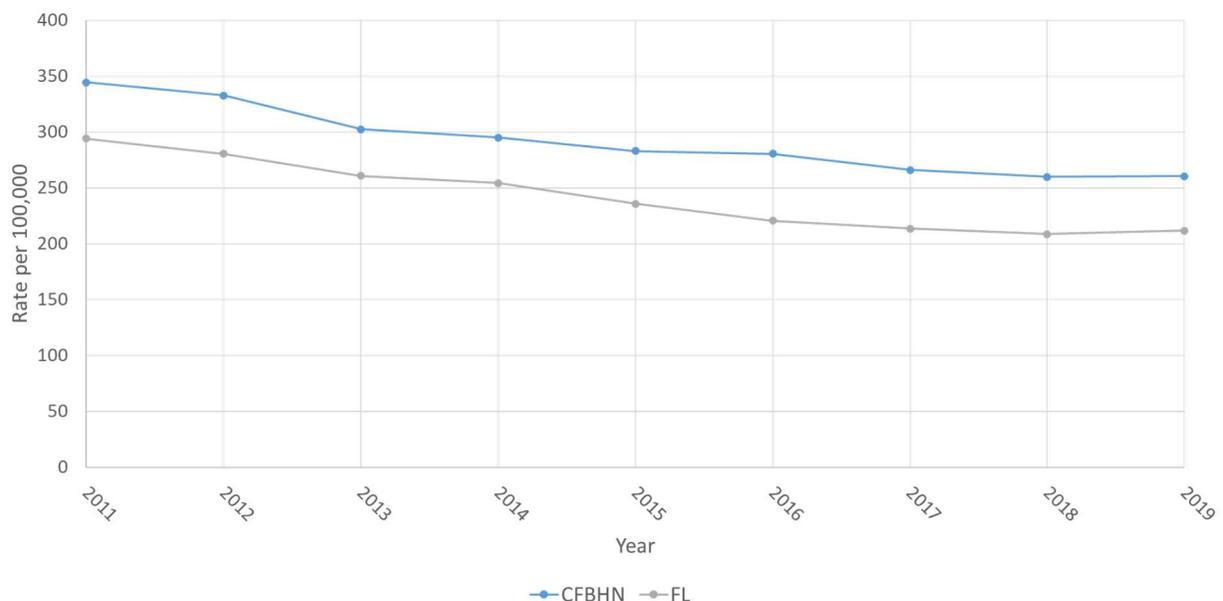


Figure 108. DUI Citations, Florida and Central Florida Behavioral Health Network, Inc., 2011 – 2019. Source: [FLHSMV](#).

Though rates of citation for DUI in the MER served by BBCBC dba NWF Health have also been consistently above those for the state, the downward trend in this MER has been slower, resulting in diverging rates between the state as a whole and this MER (Figure 109). In 2019, the rate of citation for DUI actually increased in the MER served by BBCBC to 256 citations per 100,000 population.

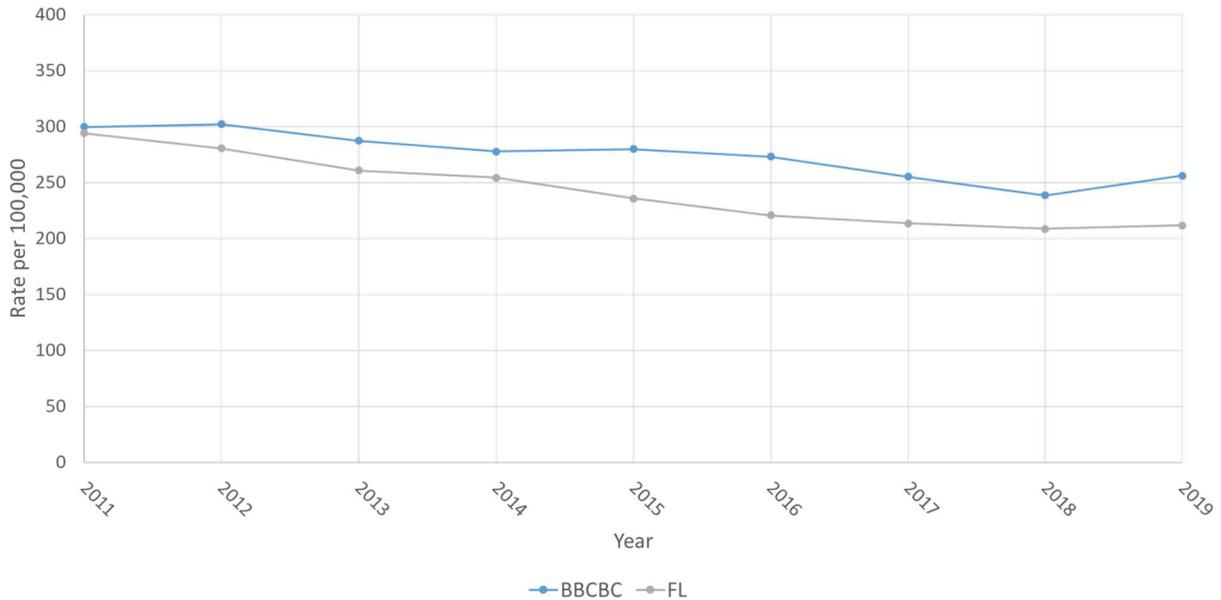


Figure 109. DUI Citations, Florida and Big Bend Community Based Care dba NWF Health, 2011 – 2019. Source: [FLHSMV](#).

In three MERs, the trend in citations for DUI has tracked very closely with the overall rate for the state: those MERs served by Lutheran Services Florida (LSF), Southeast Florida Behavioral Health Network (SEFBHN), and Central Florida Cares Health System (CFCHS) (Figures 110 – 112). In the MER served by LSF, rates of citation for DUI were similar or identical to those for the state during the period of observation, ending just above the state rate (212 citations per 100,000 population) in 2019 at 220 citations for DUI per 100,000 population (Figure 110).

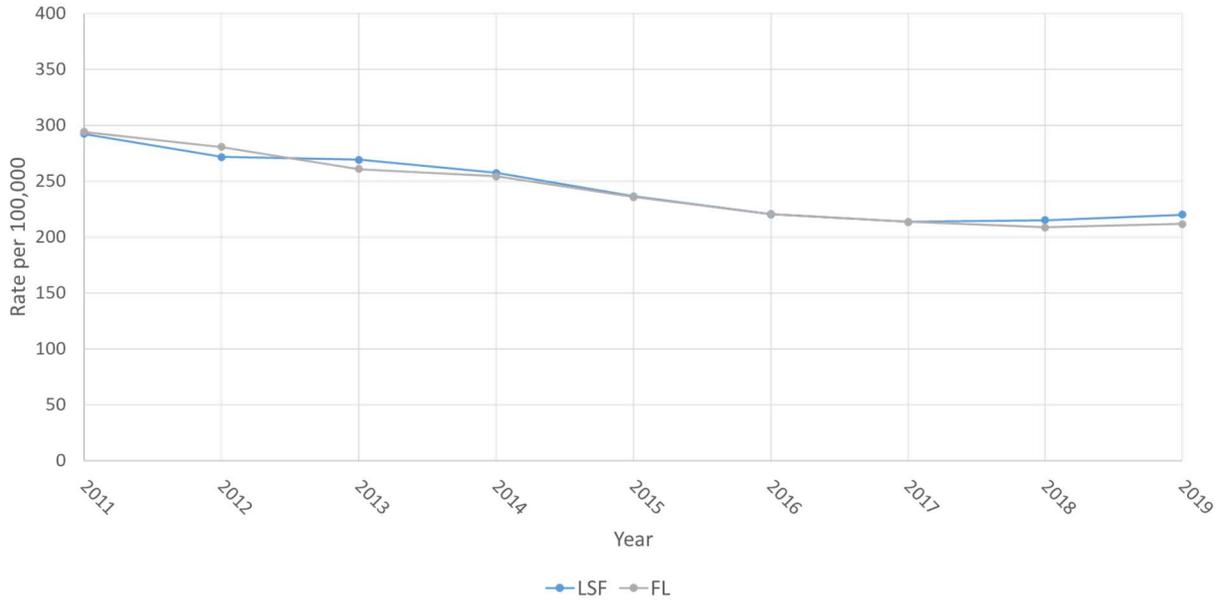


Figure 110. DUI Citations, Florida and Lutheran Services Florida, 2011 – 2019. Source: [FLHSMV](#).

Likewise, rates of citation for DUI in the MER served by SEFBHN tracked very closely with those for the state overall (Figure 111). Though the rate of citation for DUI in the MER served by SEFBHN remains below that of the state overall, there was a slight increase in 2019 to 207 citations per 100,000 population.

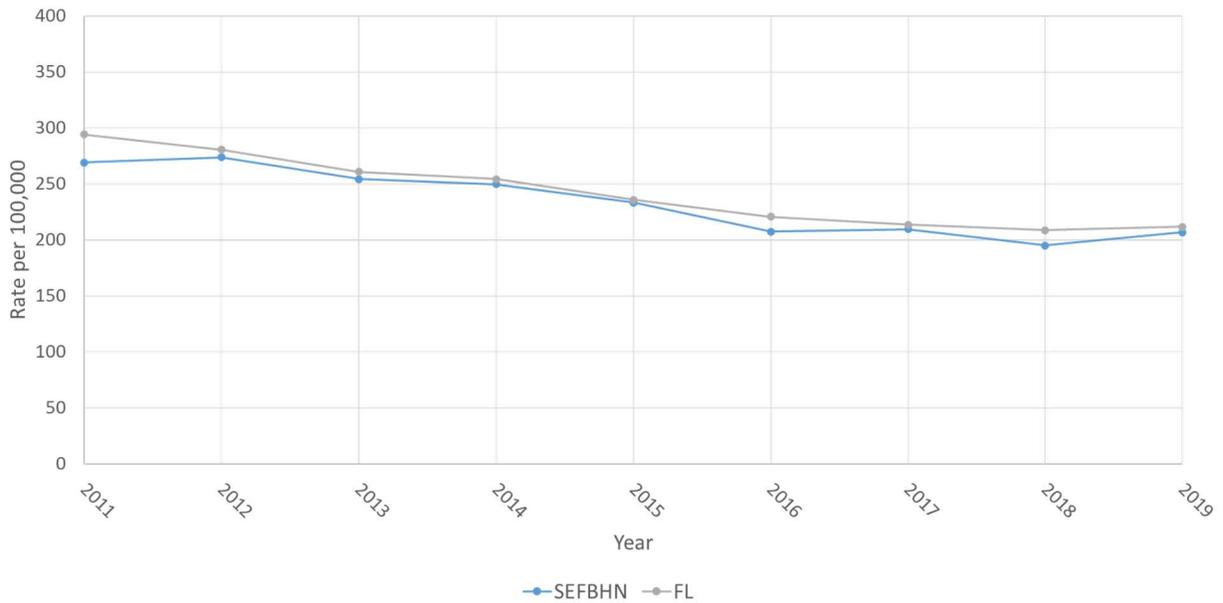


Figure 111. DUI Citations, Florida and Southeast Florida Behavioral Health Network, 2011 – 2019. Source: [FLHSMV](#).

In the MER served by CFCHS, rates of citation for DUI were very close to those for the state overall through 2015, after which the decline in rates for the MER accelerated a bit, ending with an MER-specific rate of 186 citations for DUI per 100,000 population in 2019 (Figure 112).

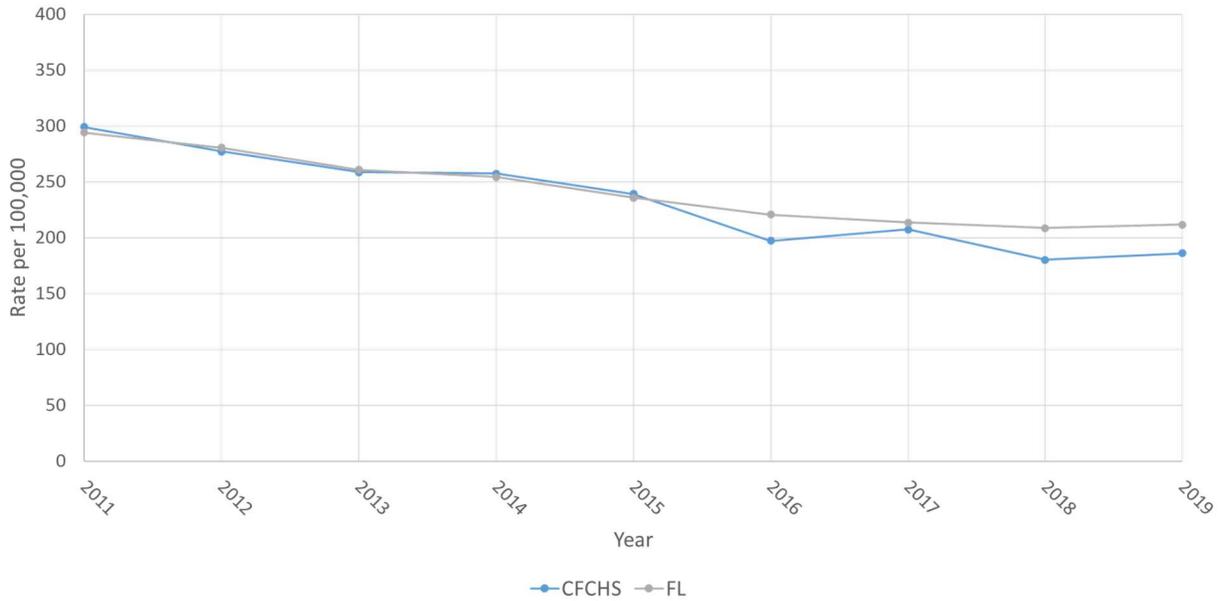


Figure 112. DUI Citations, Florida and Central Florida Cares Health System, 2011 – 2019.
Source: [FLHSMV](#).

In Broward County, the rate of citation for DUI was consistently below the state rate for much of the period, and though the trend remains downward for the period overall, a marked increase from 2017 to 2018 dampened the trend (Figure 113). The rate of citation for DUI was 200 per 100,000 population in 2019.

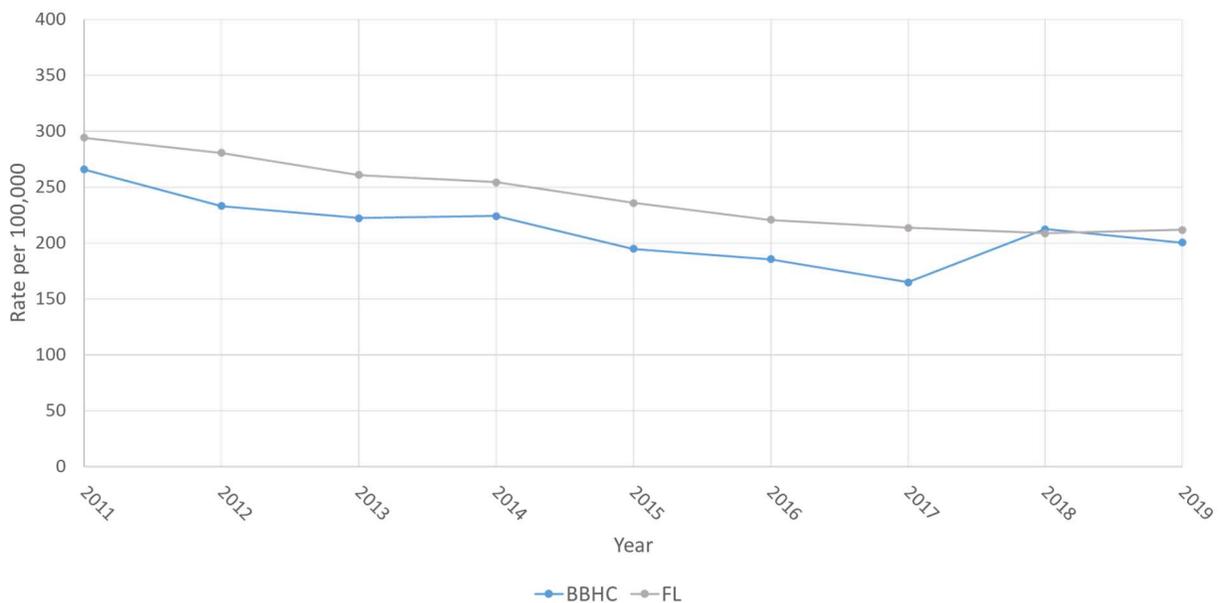


Figure 113. DUI Citations, Florida and Broward Behavioral Health Coalition, 2011 – 2019.
Source: [FLHSMV](#).

In the MER served by South Florida Behavioral Health Network, Inc. dba Thriving Mind, the rate of citation for DUI has consistently been the lowest in the state, ranging from 64 to 99 citations per 100,000 population lower than the state rate (Figure 114). The rate of citation for DUI was 112 per 100,000 population in 2019.

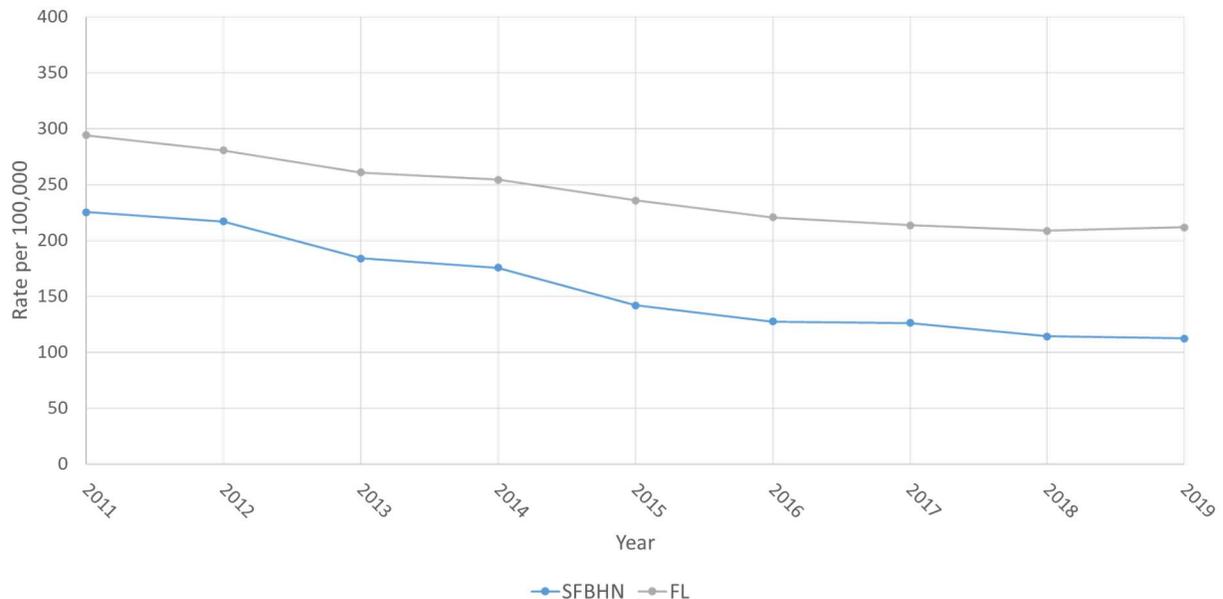


Figure 114. DUI Citations, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2011 – 2019. Source: [FLHSMV](#).

ALCOHOL- AND DRUG-RELATED MOTOR VEHICLE CRASHES, INJURIES, AND FATALITIES

As mentioned in the previous section, driving under the influence of alcohol and other substances increases the risk of motor vehicle crash (MVC). Continuing up the *Injury Pyramid for Substance Use* (Figure 1), 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

Following a considerable decline from 2012 to 2013, rates of motor vehicle crash (MVC) involving alcohol have continued to decline in Florida, but at a much slower rate (Figure 115). There is considerable variability in the rate of MVC involving alcohol by MER, ranging from a series high of 44.9 crashes per 100,000 population in the MER served by Big Bend Community Based Care dba NWF Health in 2015 to 7.0 crashes per 100,000 population in Broward County in 2019 (Figure 115).

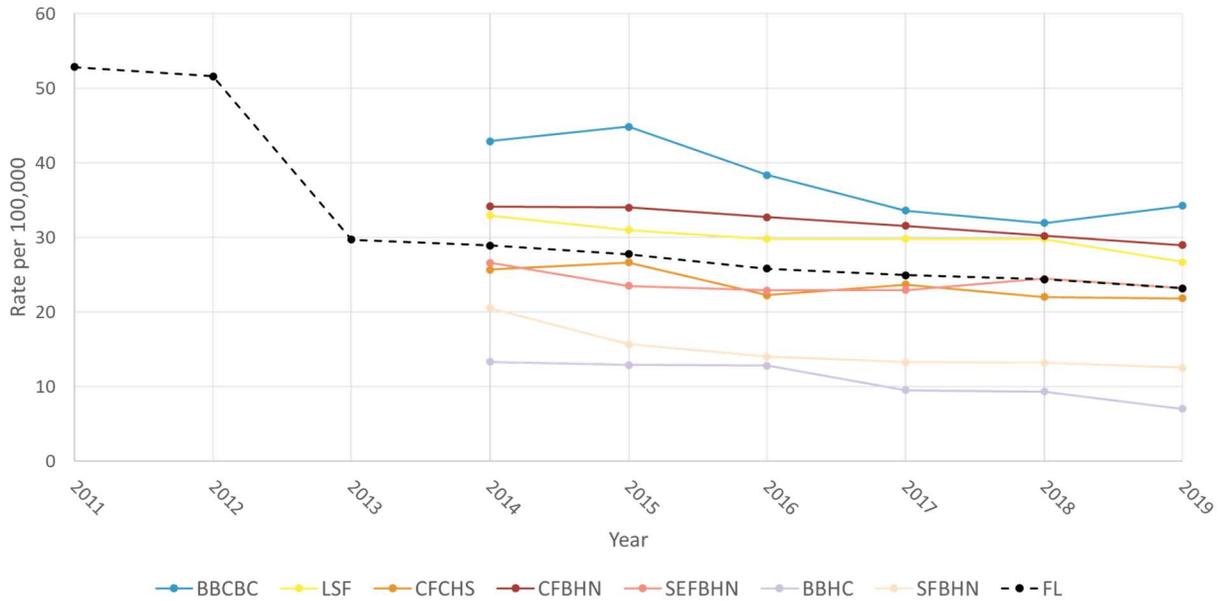


Figure 115. Alcohol Confirmed Crashes, Florida and Managing Entity Regions, 2011 – 2019.

Source: [FLHSMV](#).

Like all MVC involving alcohol, injuries occurring during MVC involving alcohol have been on a slow downward trend (Figure 116). Similar to crashes, there is variability in the rate of injury by MER as well (Figure 116). The pattern in the variability is similar for crashes and injuries.

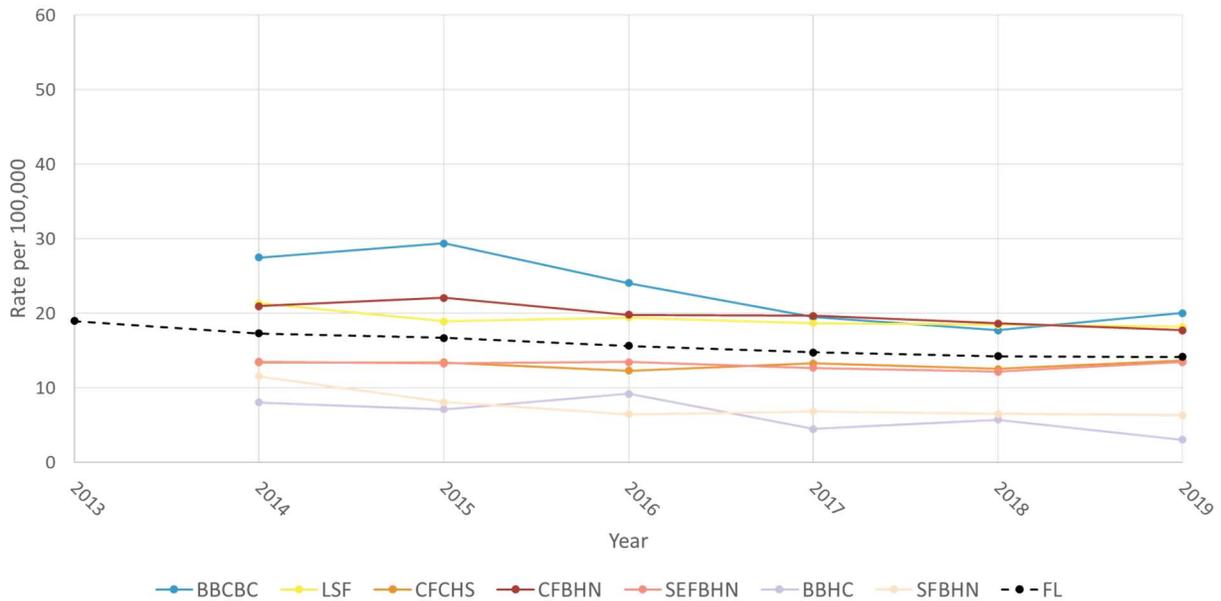


Figure 116. Alcohol Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019.

Source: [FLHSMV](#).

Consistent with crashes and injuries, fatalities have been on a downward trend since 2013 (Figure 117 and Figure 115).

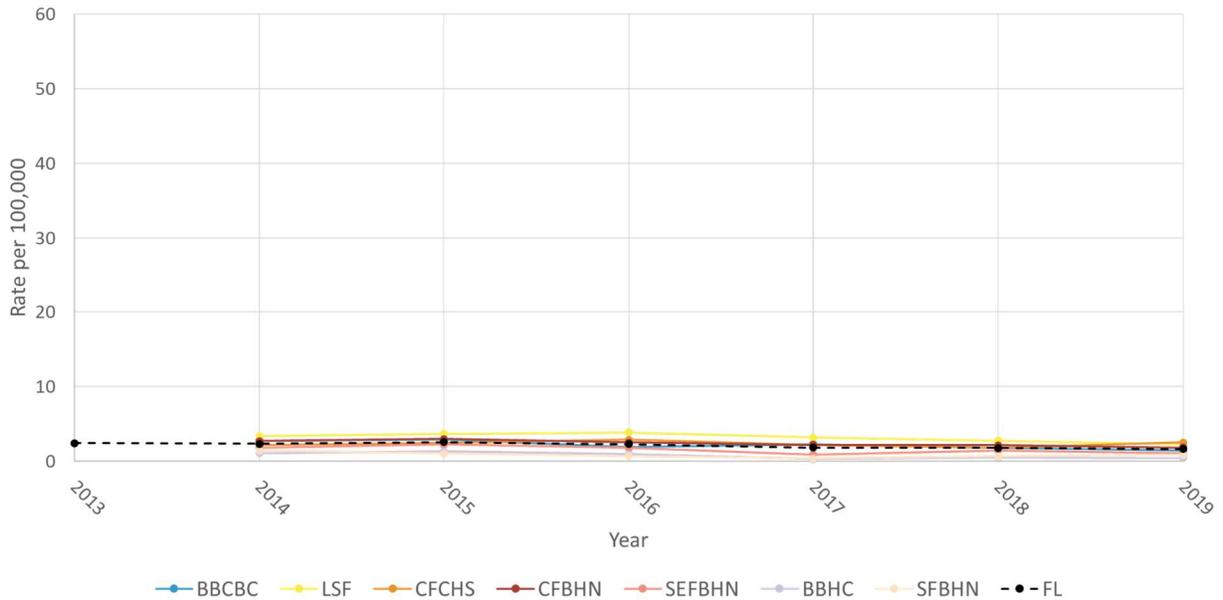


Figure 117. Alcohol Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019. Source: [FLHSMV](#).

Similar to both crashes and injuries, there is also variability by MER in the incidence of fatalities; however, the pattern is different (Figure 118). Note that the data presented in Figure 118 are the same as those presented in Figure 117; the scale of the y-axis has changed, however.

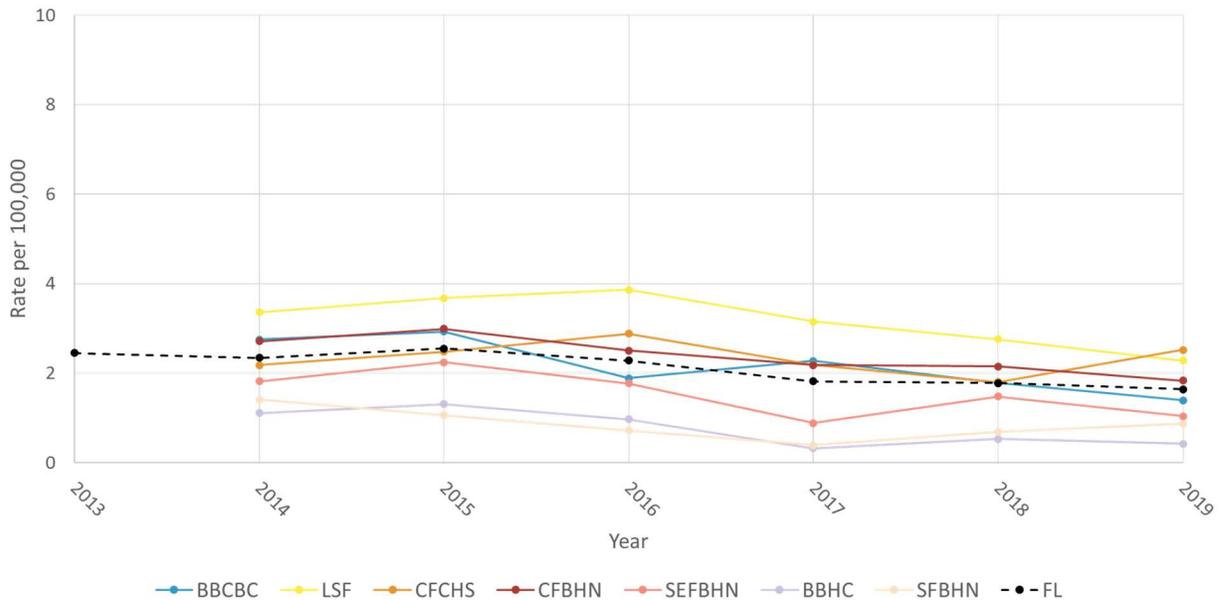


Figure 118. Alcohol Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019. Source: [FLHSMV](#).

Though the rate of MVC involving alcohol for the MER served by Big Bend Community Based Care (BBCBC) (34.3 crashes per 100,000 population in 2019) is higher than the rate for the state overall (23.2 crashes per 100,000 population in 2019), the rate of fatalities in MVC involving alcohol is similar to that of the state (1.39 fatalities per 100,000 population in the MER served by BBCBC versus 1.64 fatalities per 100,000 population in FL in 2019) (Figure 119). Also notable, the rate of MVC involving alcohol in the MER served by BBCBC has also declined more quickly than for the state overall.

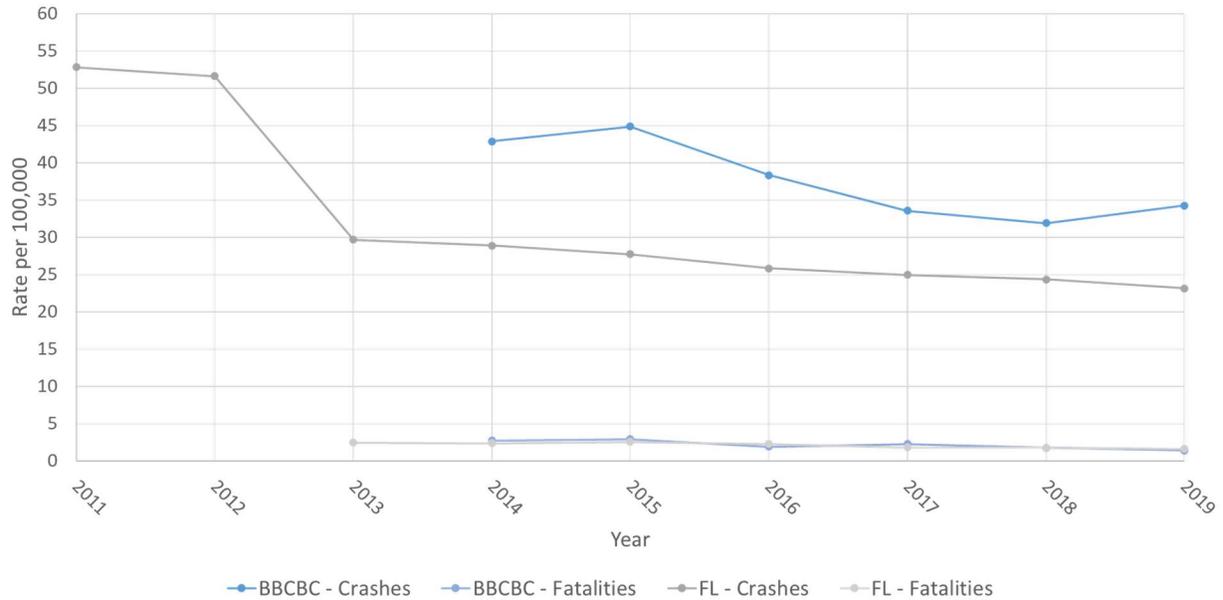


Figure 119. Alcohol Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care dba NWF Health, 2011 – 2019. Source: [FLHSMV](https://www.flhsmv.com).

In the MER served by Lutheran Services Florida (LSF), although the rate of MVC crash is consistently above that for the state, it is closer than those observed for the MER served by BBCBC dba NWF Health (Figure 119 and Figure 120). For example, in 2019, 26.7 MVC involving alcohol occurred per 100,000 population in the MER served by LSF, compared to the 23.2 crashes per 100,000 population in the state overall. However, the rate of fatalities in MVC involving alcohol was consistently above the state rate (Figure 120): 2.28 fatalities per 100,000 population in the MER served by LSF compared to 1.64 fatalities per 100,000 population in Florida overall, in 2019).

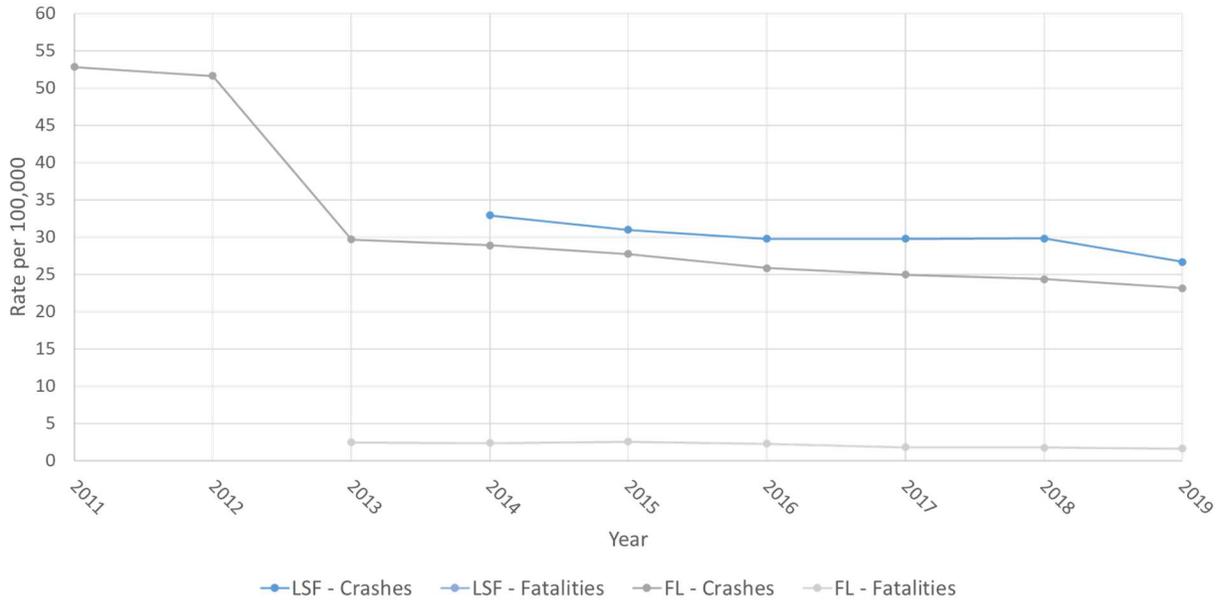


Figure 120. Alcohol Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2011 – 2019. Source: [FLHSMV](#).

A similar pattern is observed in the MER served by Central Florida Behavioral Health Network, Inc. (CFBHN) (Figure 121). The rate of MVC involving alcohol was 29.0 crashes per 100,000 population in 2019 (the second highest in the state), well above the state rate of 23.3 crashes per 100,000 population. Though the rate of fatality was lower in the MER served by CFBHN than the MER served by LSF, the rate of fatality during these crashes was still above that of the state at 1.83 fatalities per 100,000 population.

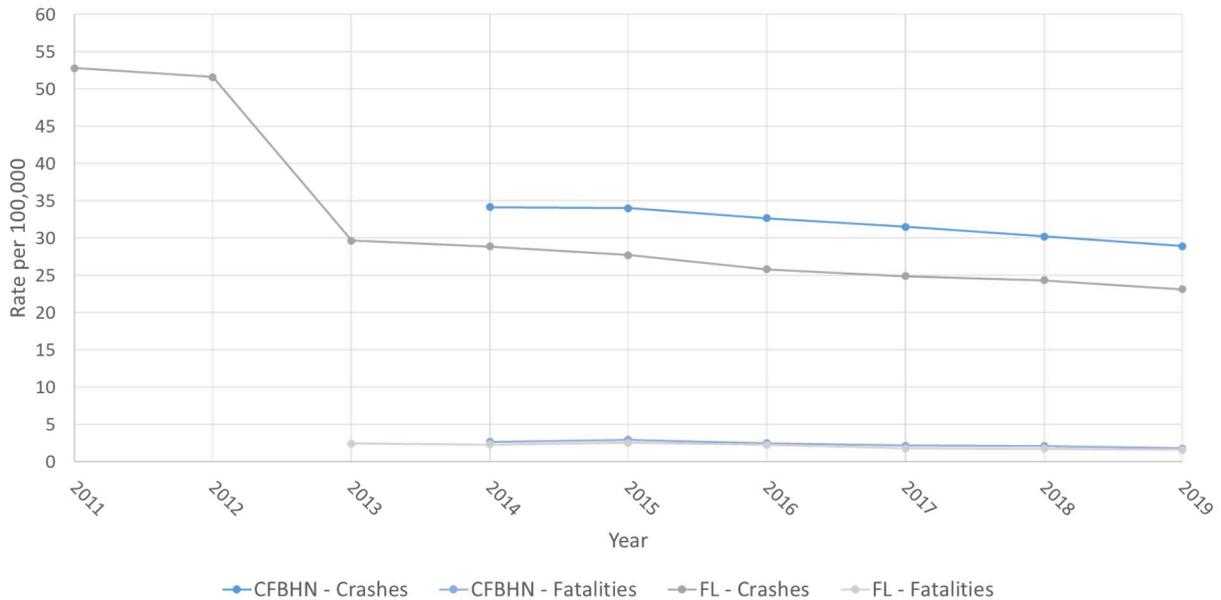


Figure 121. Alcohol Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2011 – 2019. Source: [FLHSMV](#).

As you move south along the east coast of the state, rates of MVC involving alcohol decline, with a rate of 21.8 MVC per 100,000 population observed in 2019 for the MER served by the Central Florida Cares Health System (CFCHS) (Figure 122). The rate of fatality increased in only two MERs, and the largest increase occurred in the MER served by CFCHS, from 1.80 alcohol-involved MVC fatalities per 100,000 population in 2018 to 2.52 of these fatalities per 100,000 population in 2019.

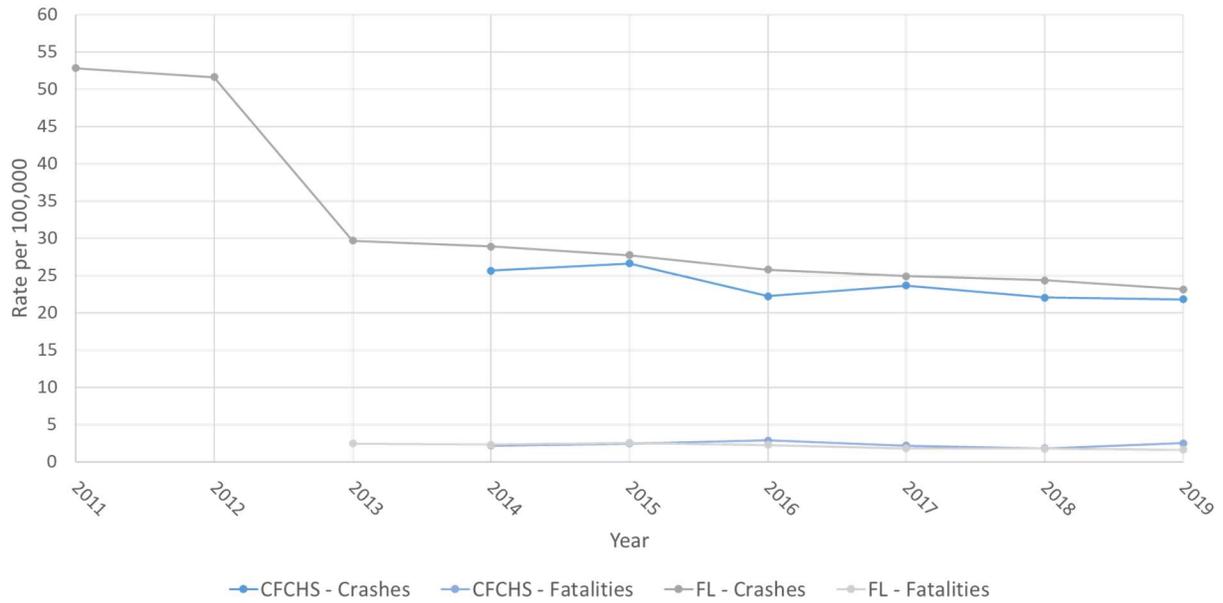


Figure 122. Alcohol Confirmed Crashes and Fatalities, Florida and Central Florida Cares Health System, 2011 – 2019. Source: [FLHSMV](#).

The rate of MVC involving alcohol in the MER served by the Southeast Florida Behavioral Health Network (SEFBHN) is very similar to that of the state overall, with the rates converging in 2019 at 23.2 MVC involving alcohol per 100,000 population (Figure 123). Rates of fatality during these crashes remain below that of the state in spite of an increase from 2017 to 2018. The rate in the MER served by SEFBHN was 1.04 deaths due to MVC involving alcohol per 100,000 population.

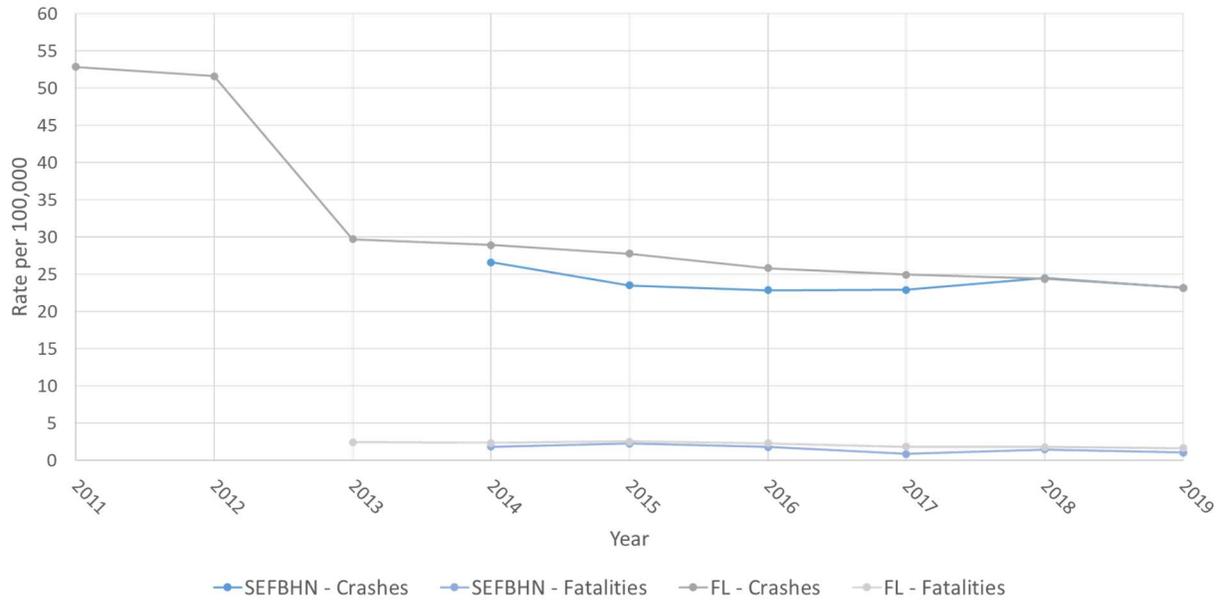


Figure 123. Alcohol Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2011 – 2019. Source: [FLHSMV](#).

The southernmost MERs have the lowest rates of MVC involving alcohol in Florida. The rate in Broward County is the lowest in the state, and considerably lower than all others at 7.03 MVC involving alcohol per 100,000 population (Figure 124). The rate of fatality during these crashes is also the lowest in the state in Broward County at 0.42 fatalities during an MVC involving alcohol per 100,000 population.

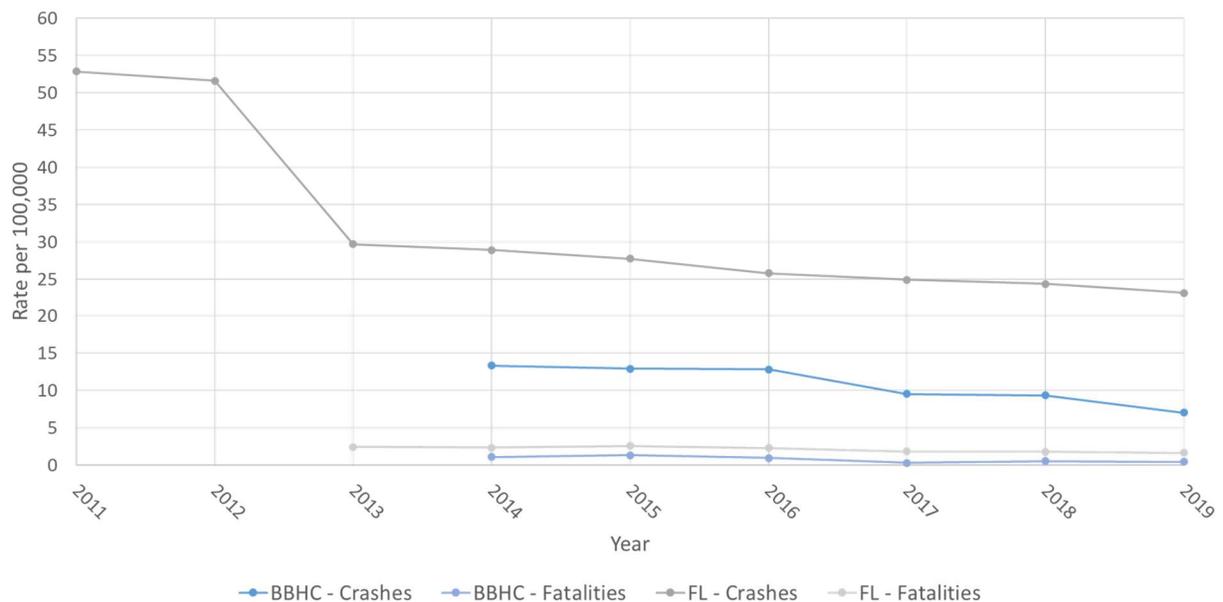


Figure 124. Alcohol Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2011 – 2019. Source: [FLHSMV](#).

The rate of MVC involving alcohol in the MER served by South Florida Behavioral Health Network, Inc. (SFBHN) was 12.5 per 100,000 in 2019 (Figure 125). In spite of low rates of fatalities during MVC involving alcohol, there was an increase from 2018 in the rate to 0.87 per 100,000 population in 2019 in the MER served by SFBHN.

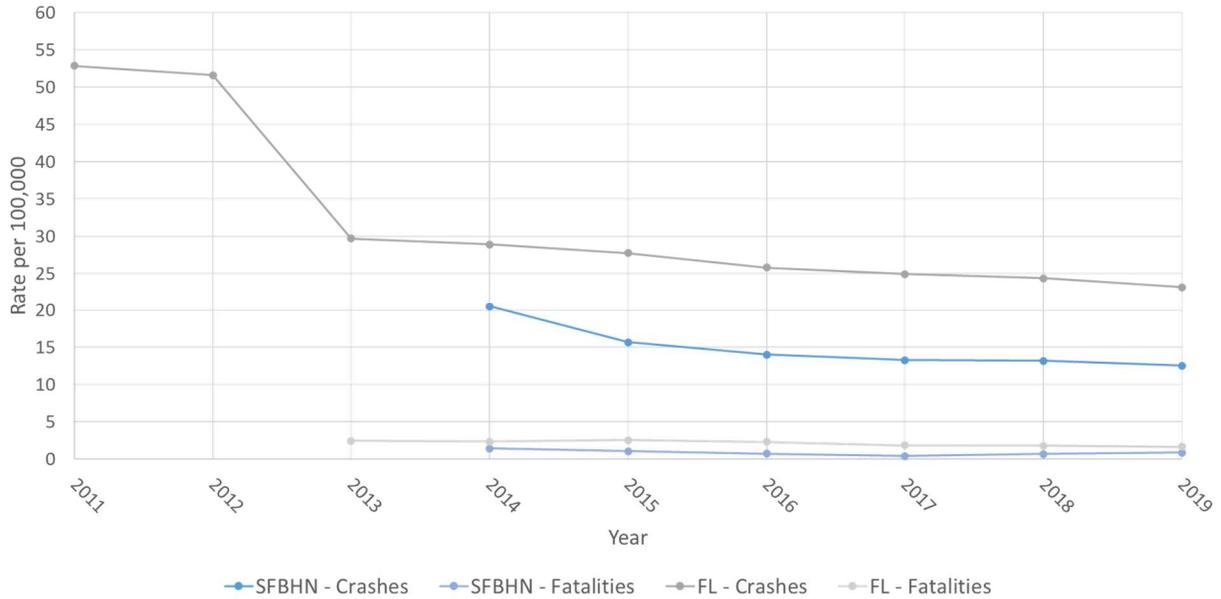


Figure 125. Alcohol Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2011 – 2019. Source: [FLHSMV](#).

Motor Vehicle Crashes Confirmed to Involve Drugs Other than Alcohol

Though drug-involved motor vehicle crashes (MVC) occur less frequently than alcohol-involved MVC, the trend in the incidence of these crashes is upward (Figure 126). Differences in the MER-specific rates are similar to the alcohol-involved crashes, with the highest rates observed in the northern part of the state (BBCBC and LSF) and the lowest in the southern part of FL (BBHC and SFBHN).

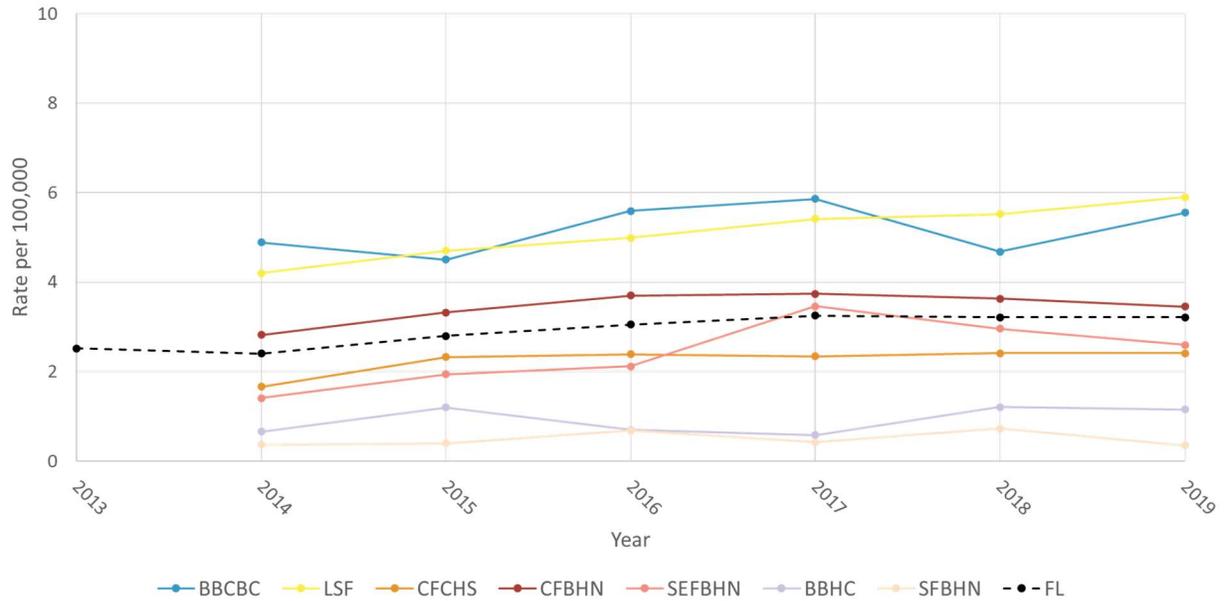


Figure 126. Drug Confirmed Crashes, Florida and Managing Entity Regions, 2013 – 2019.

Source: [FLHSMV](http://FLHSMV.com).

The trend in injury sustained during drug-involved MVC is also upward (Figure 127). Differences in the MER-specific rates of injury that result from a drug-involved MVC are similar to the alcohol-involved crashes, with the highest rates observed in the northern part of the state (BBCBC and LSF) and the lowest in the southern part of FL (BBHC and SFBHN) (Figure 127).

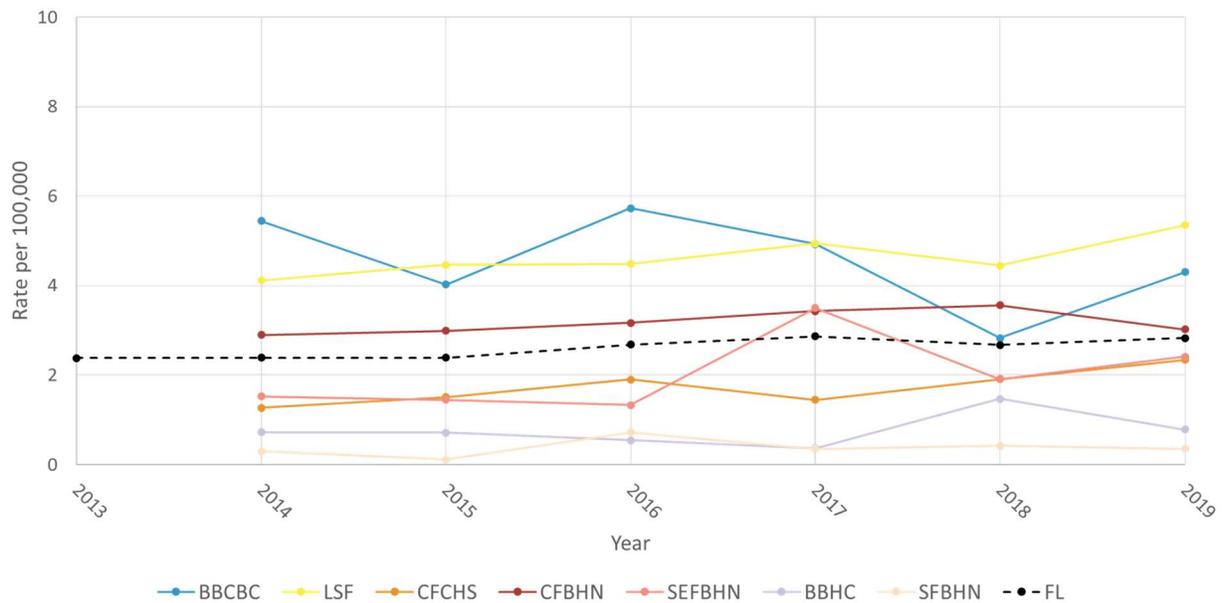


Figure 127. Drug Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019.

Source: [FLHSMV](http://FLHSMV.com).

Fatalities resulting from drug-involved MVC are also trending upward (Figure 128). Variability in the MER-specific rates of fatality resulting from drug-involved MVC exists as well, with the highest rate in the LSF region notably above the others and the lowest rates continuing to be in the southern-most part of the state (Figure 128).

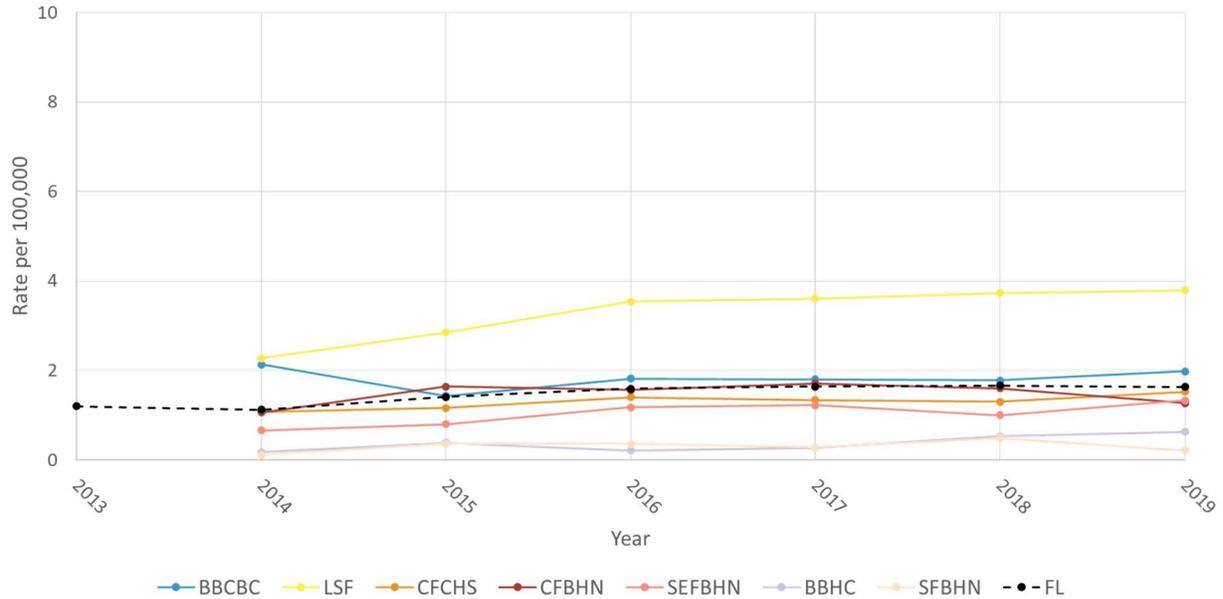


Figure 128. Drug Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019.
Source: [FLHSMV](#).

The rate of drug-involved MVC in the MER served by Big Bend Community Based Care (BBCBC) dba NWF Health is nearly double the rate for the state throughout the period of observation, ending at 5.55 crashes per 100,000 population in the region versus 3.21 crashes per 100,000 population in the state overall in 2019 (Figure 129). The rate of fatality, however, is much closer in this MER to the rate of fatality in the state overall, with 1.08 fatalities per 100,000 population occurring in the MER served by BBCBC in 2019 compared to 1.63 fatalities per 100,000 population in Florida that year.

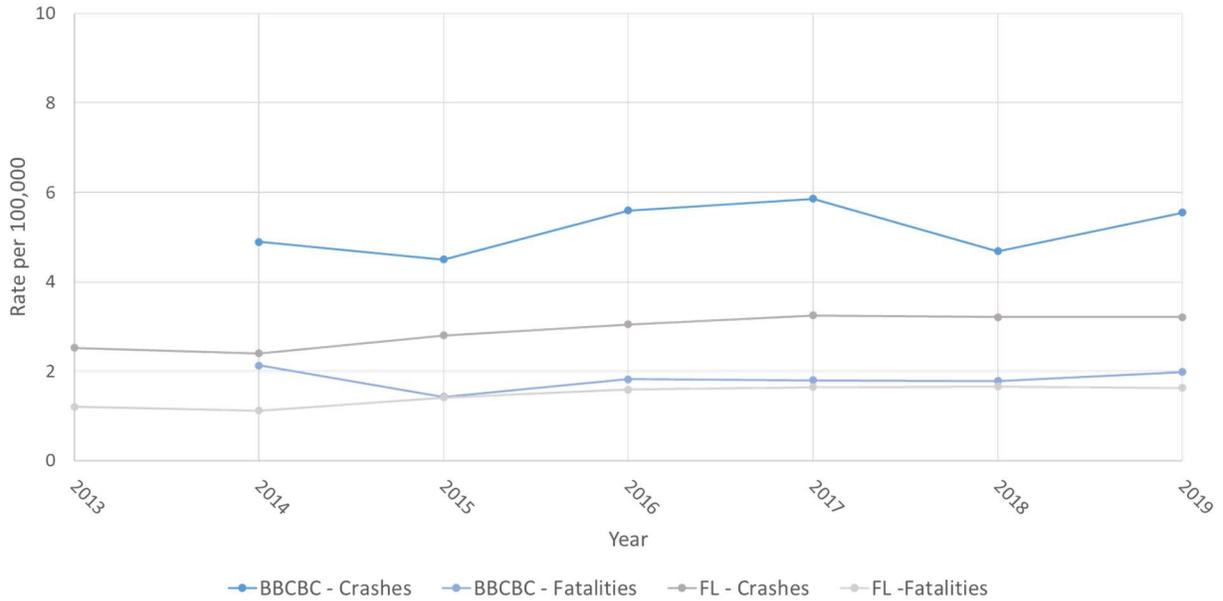


Figure 129. Drug Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care dba NWF Health, 2013 – 2019. Source: [FLHSMV](#).

Not only is the rate of drug-involved MVC in the MER served by Lutheran Services Florida (LSF) higher than that for the state overall, the rate of fatalities that occur during drug-involved MVC exceeds even the rate of these crashes in Florida (Figure 130). The rate of drug-involved MVC in the MER served by LSF was 5.9 MVC per 100,000 population in 2019, and the rate of fatality in these crashes was 3.79 fatalities per 100,000 population in 2019.

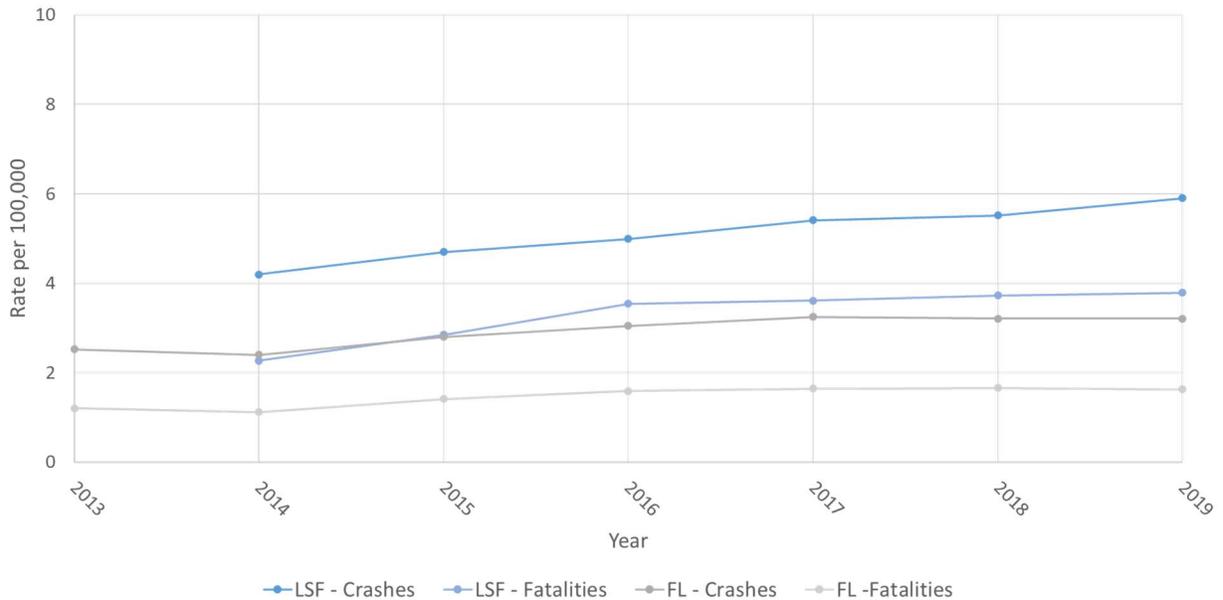


Figure 130. Drug Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2013 – 2019. Source: [FLHSMV](#).

Rates of drug-involved MVC in the MER served by Central Florida Behavioral Health Network, Inc. (CFBHN) are still above, but closer to, the rate of these crashes for the state overall (Figure 131). The rate of drug-involved MVC in the MER served by CFBHN was 3.45 crashes per 100,000 population, compared to 3.21 crashes per 100,000 population in Florida overall. The MER-specific rate of fatalities in these crashes tracked even more closely to the state rate, falling below it in 2019 to 1.27 fatalities per 100,000 population compared to 1.63 per 100,000 in Florida overall.

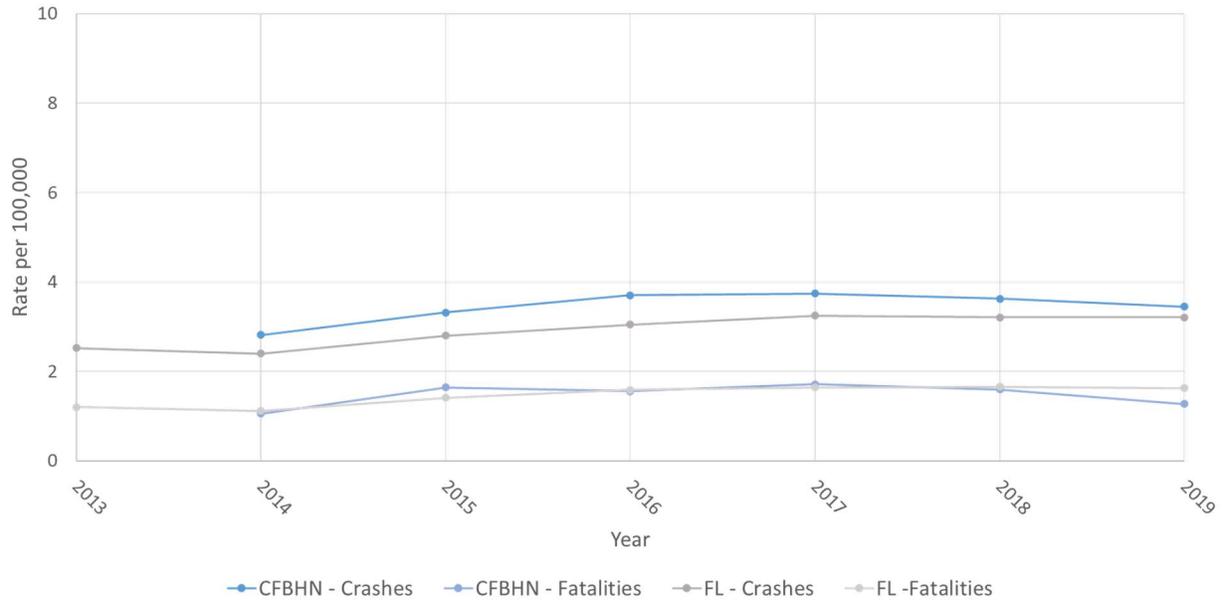


Figure 131. Drug Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2013 – 2019. Source: [FLHSMV](#).

In east central Florida, rates of both drug-involved crashes and fatalities fall below the overall states rates, though both are trending up as well (Figure 132). In the MER served by the Central Florida Cares Health System, the rates of drug-involved crashes and fatalities were 2.41 and 1.52 per 100,000 population, respectively, in 2019.

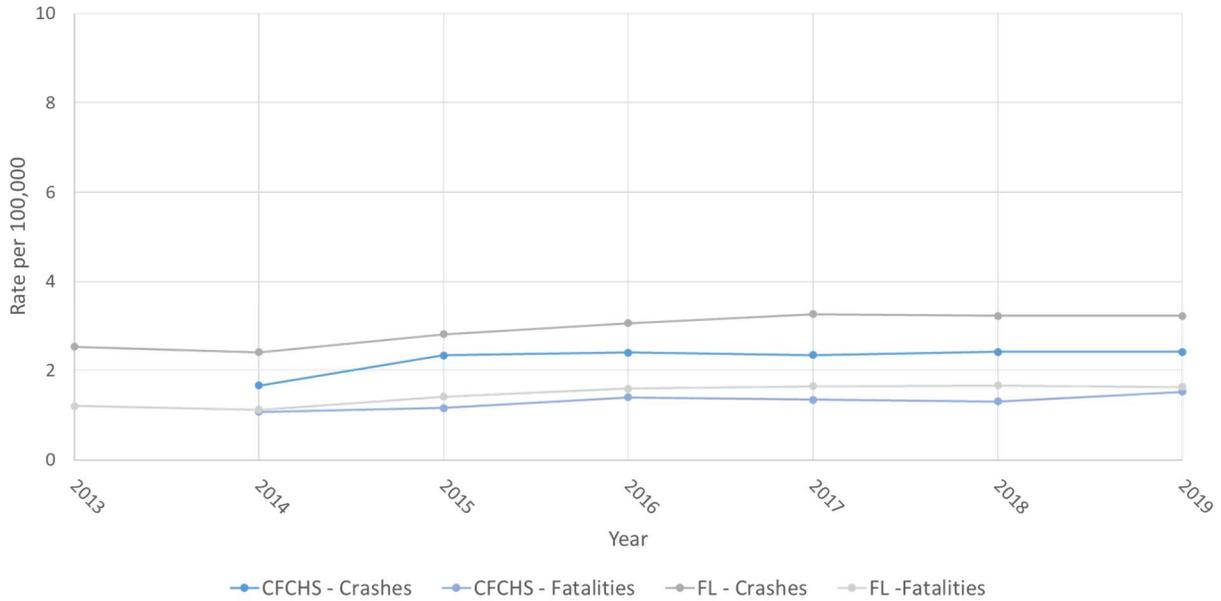


Figure 132. Drug Confirmed Crashes and Fatalities, Florida and Central Florida Cares Health System, 2013 – 2019. Source: [FLHSMV](#).

In the three southernmost MERs, with only one exception, rates for both drug-involved crashes and fatalities were below the state rates for the entire period (Figures 133 – 135). In the MER served by the Southeast Florida Behavioral Health Network, the rate of drug-involved crash declined for the second year in a row to 2.6 crashes per 100,000 population in 2019, while the rate of fatality in drug-involved crashes increased to 1.33 fatalities per 100,000 in 2019.

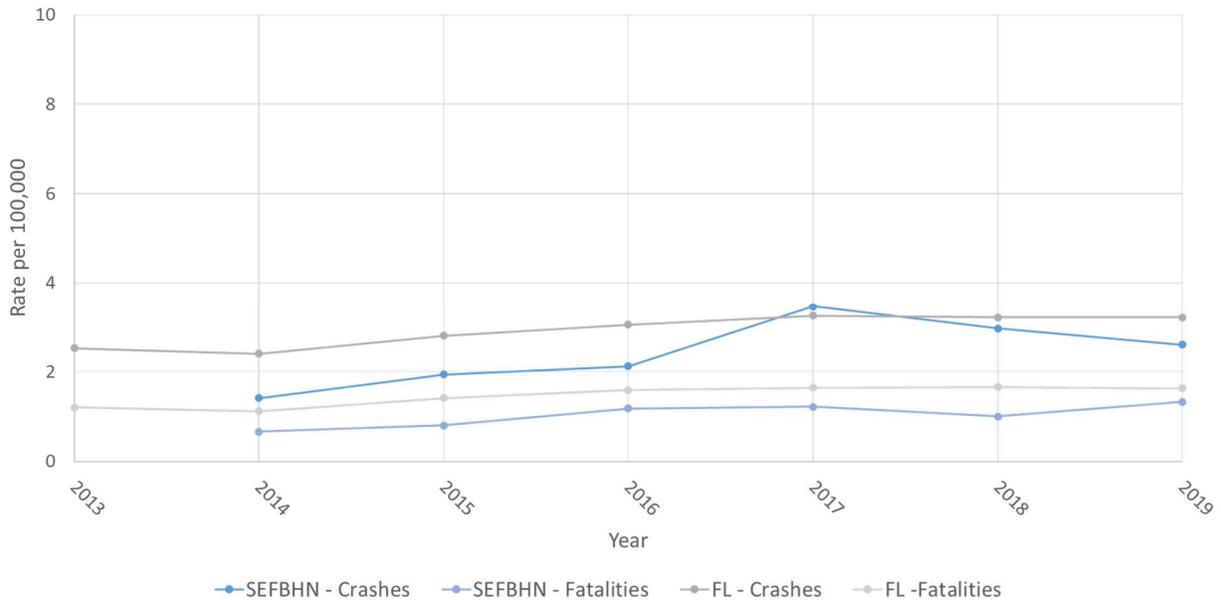


Figure 133. Drug Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2013 – 2019. Source: [FLHSMV](#).

In Broward County, both the rate of drug-involved crash and resulting fatality were well below these rates for the state overall, though the rate of fatality increased in 2019 from 2018 (Figure 134). The rates of drug-involved MVC and fatality were 1.15 and 0.63, respectively, per 100,000 population in 2019.

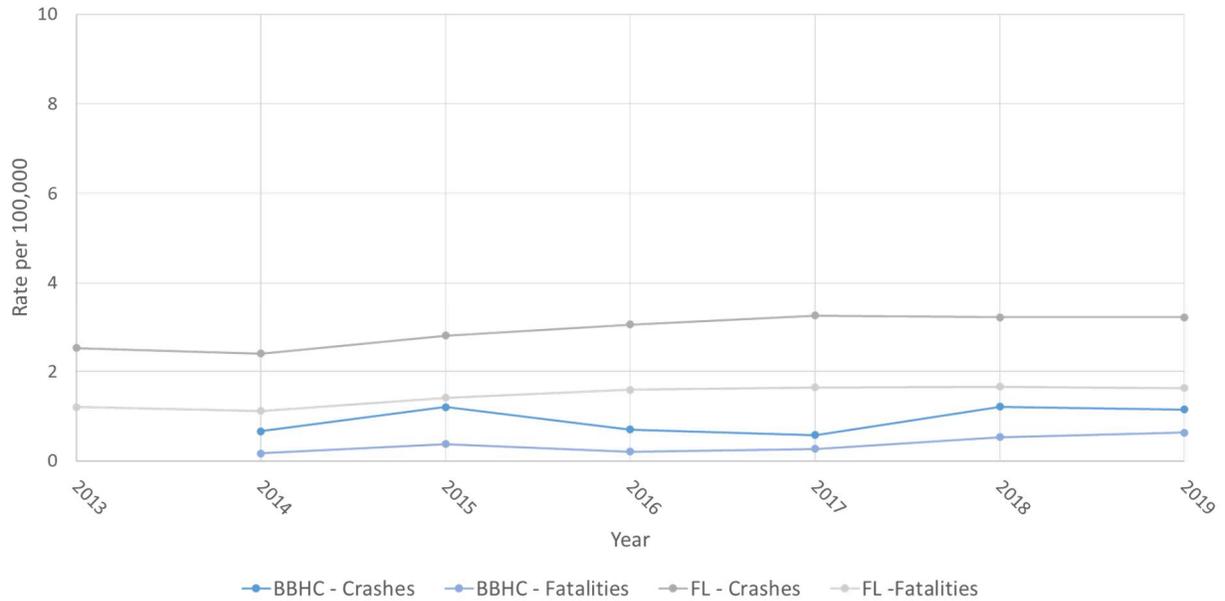


Figure 134. Drug Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2013 – 2019. Source: [FLHSMV](#).

The lowest rates in the state of drug-involved MVC and fatality are in the MER served by South Florida Behavioral Health Network, Inc. (SFBHN), well below the rates for the state overall (Figure 135). Both rates declined from 2018 to 0.35 crashes and 0.21 fatalities per 100,000 population, respectively, in 2019. The trend in crashes in the MER served by SFBHN is the closest to flat in the state, with an annual average increase of only 0.018 crashes per 100,000 population.

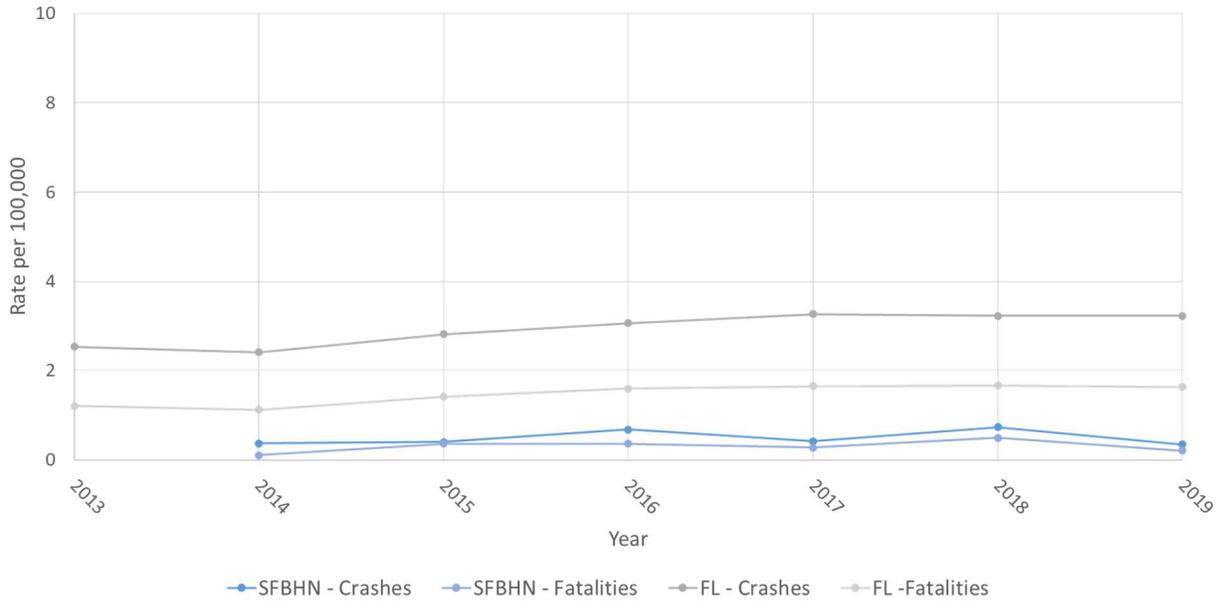


Figure 135. Drug Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2013 – 2019. Source: [FLHSMV](#).

Motor Vehicle Crashes Confirmed to Involve Both Drugs and Alcohol

Motor vehicle crashes involving both alcohol and drugs occur less frequently than the two previous categories and have been fairly stable over time (Figure 136). Differences in the MER-specific rates are similar to the alcohol-involved and drug-involved crashes, with the highest rate observed in the north central part of the state (LSF) and the lowest rates in the southern part of FL.

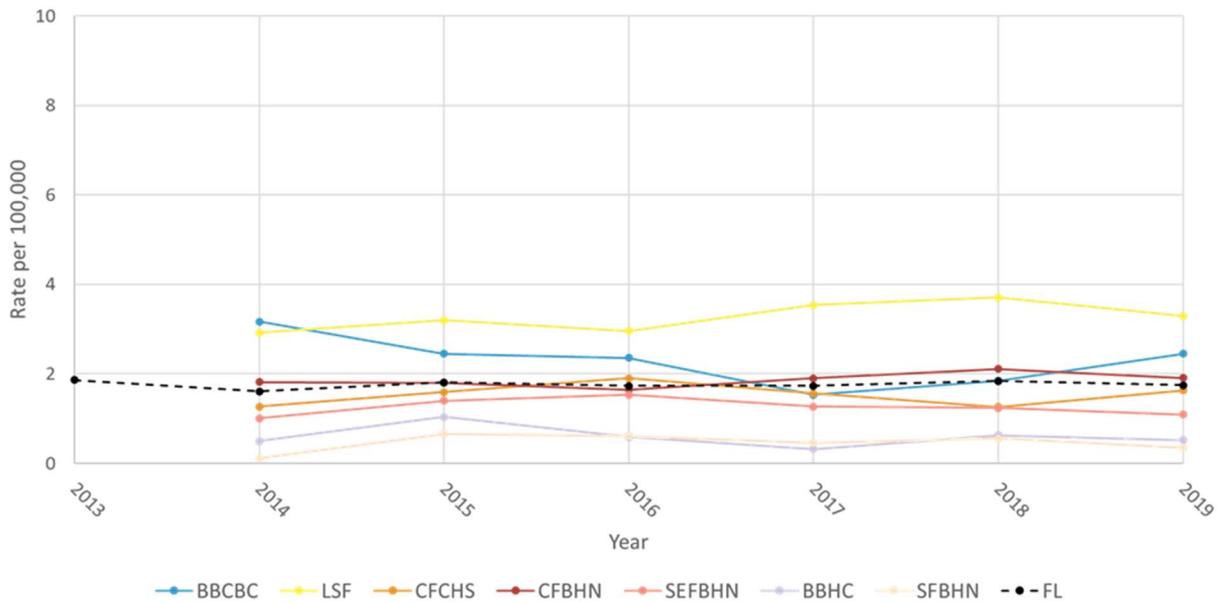


Figure 136. Alcohol and Drug Confirmed Crashes, Florida and Managing Entity Regions, 2013 – 2019. Source: [FLHSMV](#).

Like for drug-involved motor vehicle crashes, injuries, and fatalities, rates of crash, injury, and fatality are similar in magnitude, unlike rates of only alcohol-involved MVC and related injury. The trend for alcohol and drug-involved MVC injuries and fatalities is essentially flat for the period (Figure 137 and Figure 138), with a similar pattern in variability by MER to crashes.

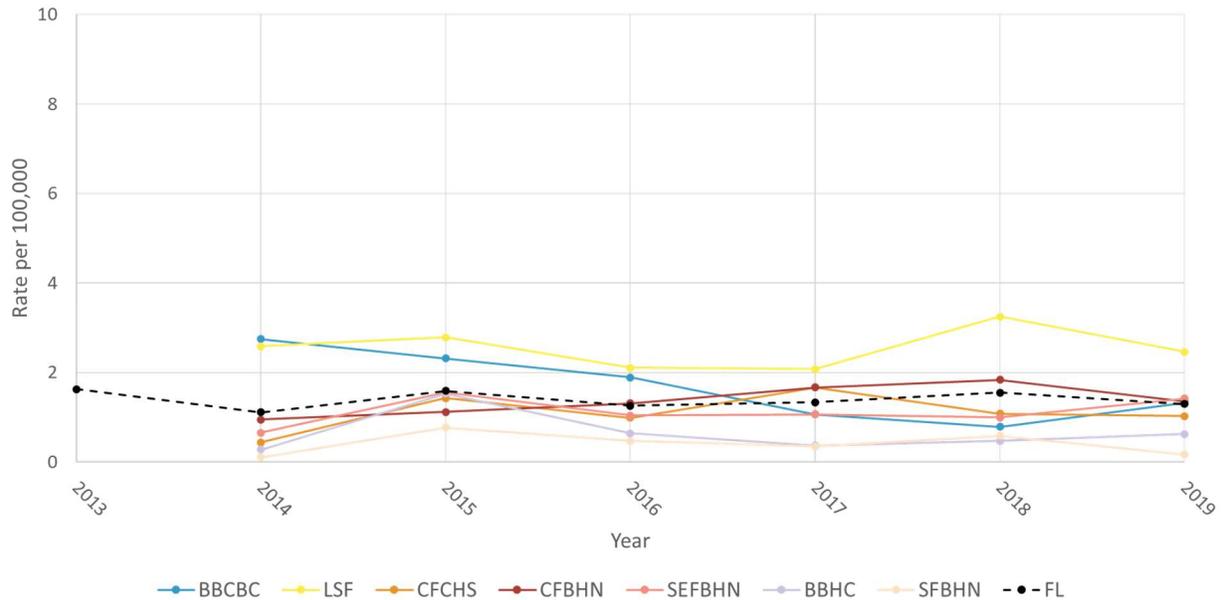


Figure 137. Alcohol and Drug Confirmed Injuries, Florida and Managing Entity Regions, 2013 – 2019. Source: FLHSMV.

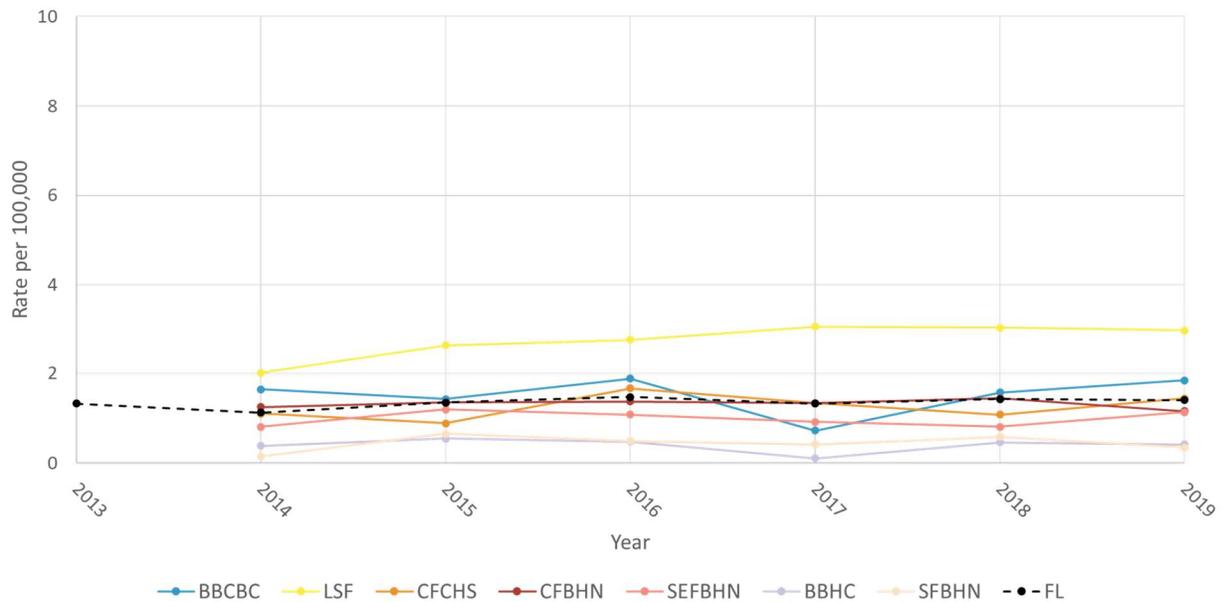


Figure 138. Alcohol and Drug Confirmed Fatalities, Florida and Managing Entity Regions, 2013 – 2019. Source: FLHSMV.

Unlike for only alcohol- and only drug-involved crashes, the rate of motor vehicle crash involving both alcohol and drugs in the MER served by Big Bend Community Based Care dba NWF Health is much closer to the rate for the state overall (Figure 139). Both the rate of alcohol and drug-involved crashes and resulting fatalities increased from 2018 to 2.45 crashes and 1.85 fatalities per 100,000 population in 2019.

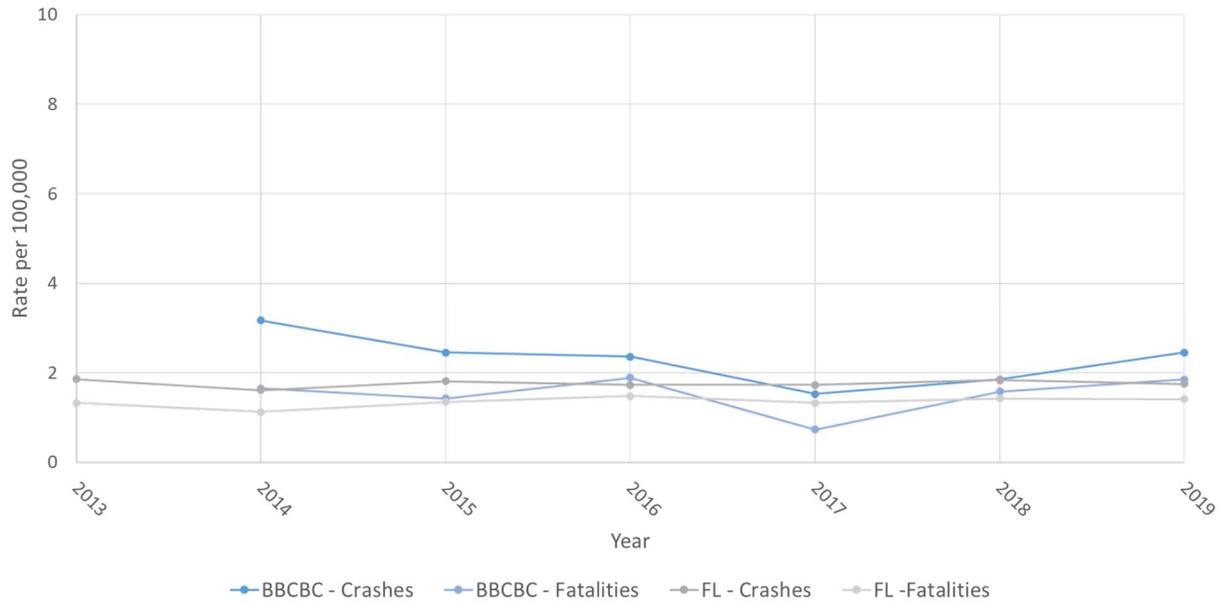


Figure 139. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Big Bend Community Based Care dba NWF Health, 2013 – 2019. Source: [FLHSMV](#).

Like for only alcohol- and drug-involved fatalities, the MER served by LSF has the highest rate of alcohol and drug-involved fatality in the state, but unlike for only alcohol and drug-involved crashes, the MER served by LSF also has the highest rate of alcohol and drug-involved MVC in the state for nearly the entire period of observation (Figure 138 and Figure 140). The rate of these crashes and fatalities both declined slightly in 2019 to 3.29 crashes and 2.96 fatalities per 100,000 population.

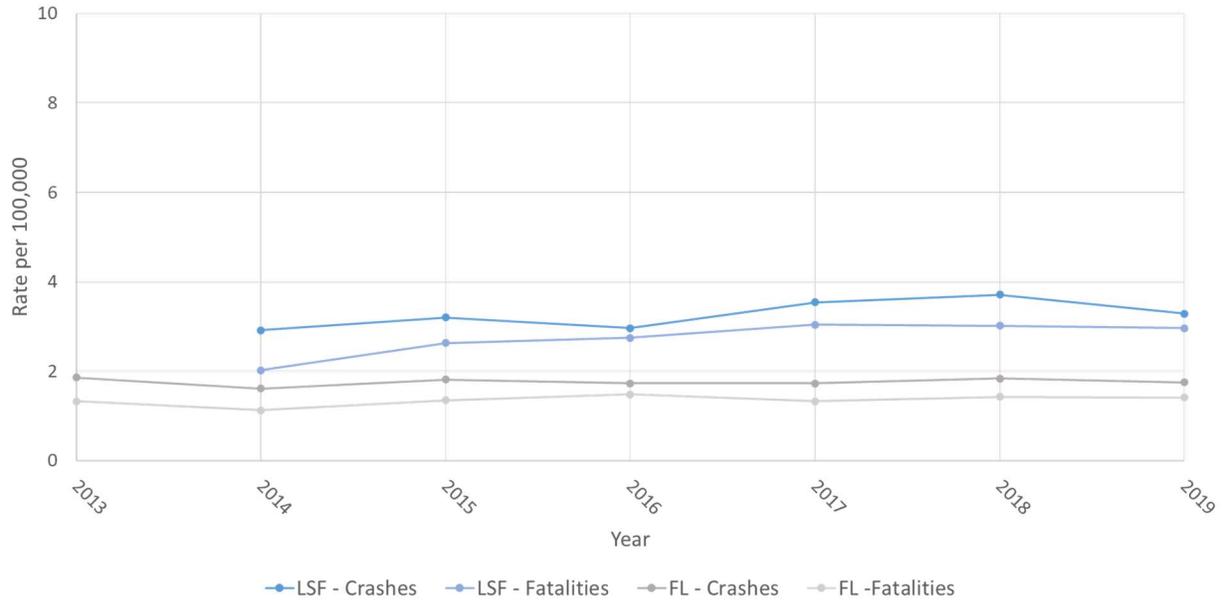


Figure 140. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Lutheran Services Florida, 2013 – 2019. Source: [FLHSMV](#).

In central Florida the rates of alcohol and drug-involved MVC and resulting fatalities were very close to the state rates overall (Figure 141 and Figure 142). In the MER served by Central Florida Behavioral Health Network, Inc., the rates of these crashes and fatalities declined slightly from 2018 to 1.91 crashes and 1.16 fatalities per 100,000 population in 2019.

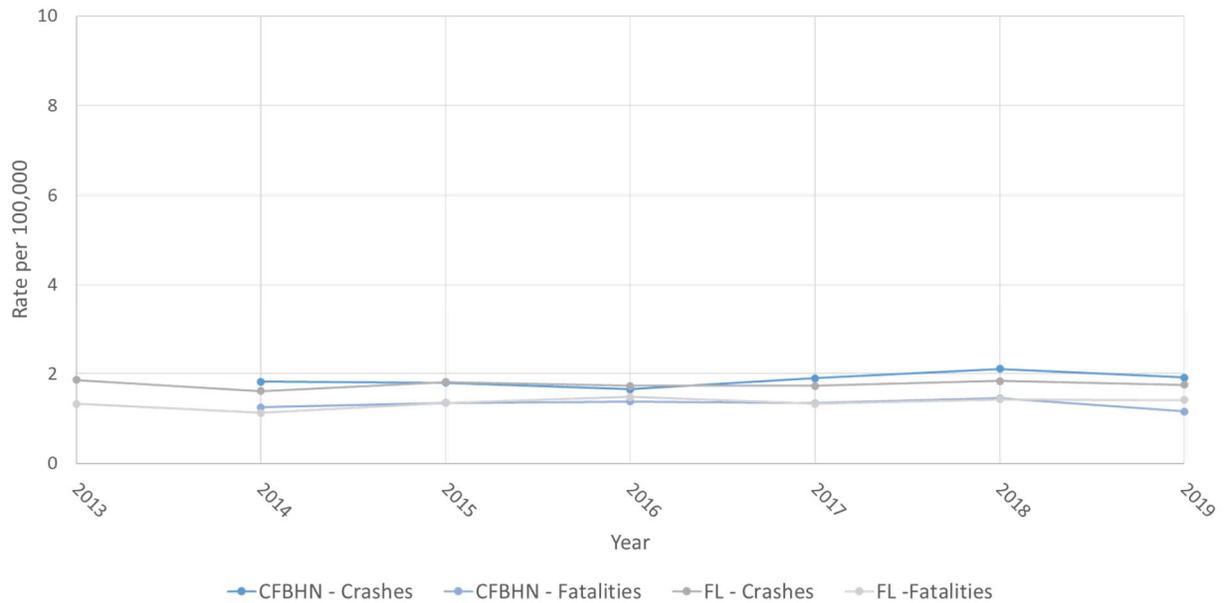


Figure 141. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Central Florida Behavioral Health Network, Inc., 2013 – 2019. Source: [FLHSMV](#).

Whereas, in the MER served by Central Florida Care Health System, alcohol and drug-involved MVC increased from 2018 to 1.45 crashes per 100,000 population in 2019, while the rate of fatality due to these crashes decreased to 1.03 fatalities per 100,000 population.

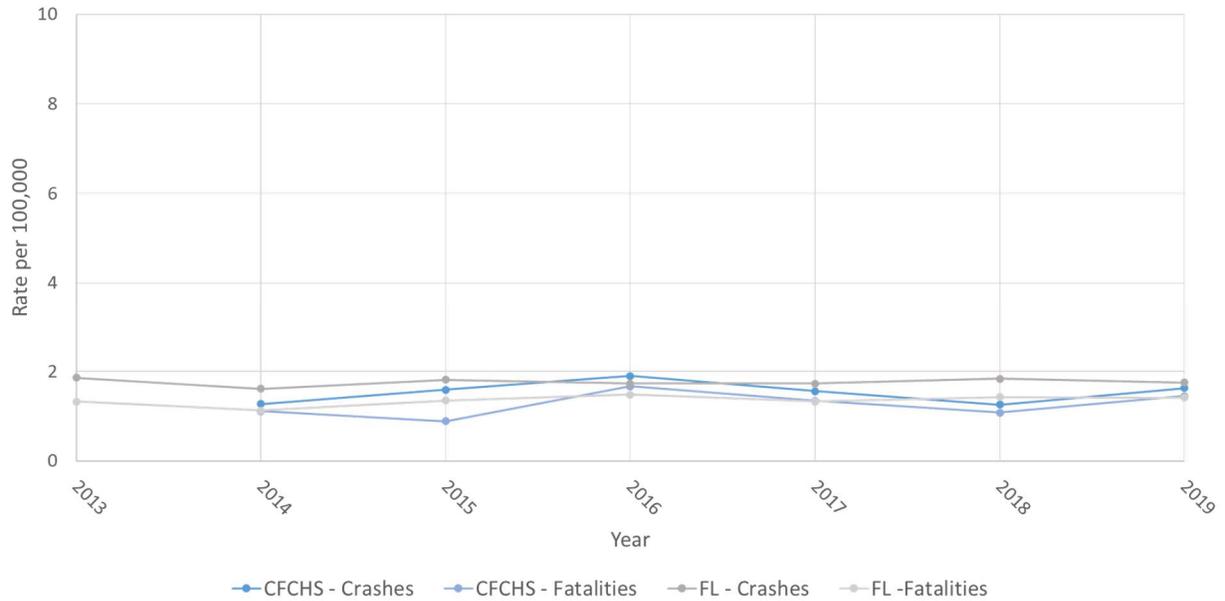


Figure 142. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Central Florida Care Health System, 2013 – 2019. Source: [FLHSMV](#).

Like only alcohol-involved and only drug-involved crashes and fatalities, rates of alcohol and drug-involved crashes and fatalities were the lowest in the three most southern MERs. Trending slightly downward, the rate of alcohol and drug-involved MVC in the MER served by the Southeast Florida Behavioral Health Network (SEFBHN) declined to 1.09 crashes per 100,000 population from 2018 to 2019 (Figure 143). In spite of a nearly flat trend in fatalities, the rate of alcohol and drug-involved MVC in the MER served by SEFBHN did increase from 2018 to 2019 to 1.14 fatalities per 100,000 population.

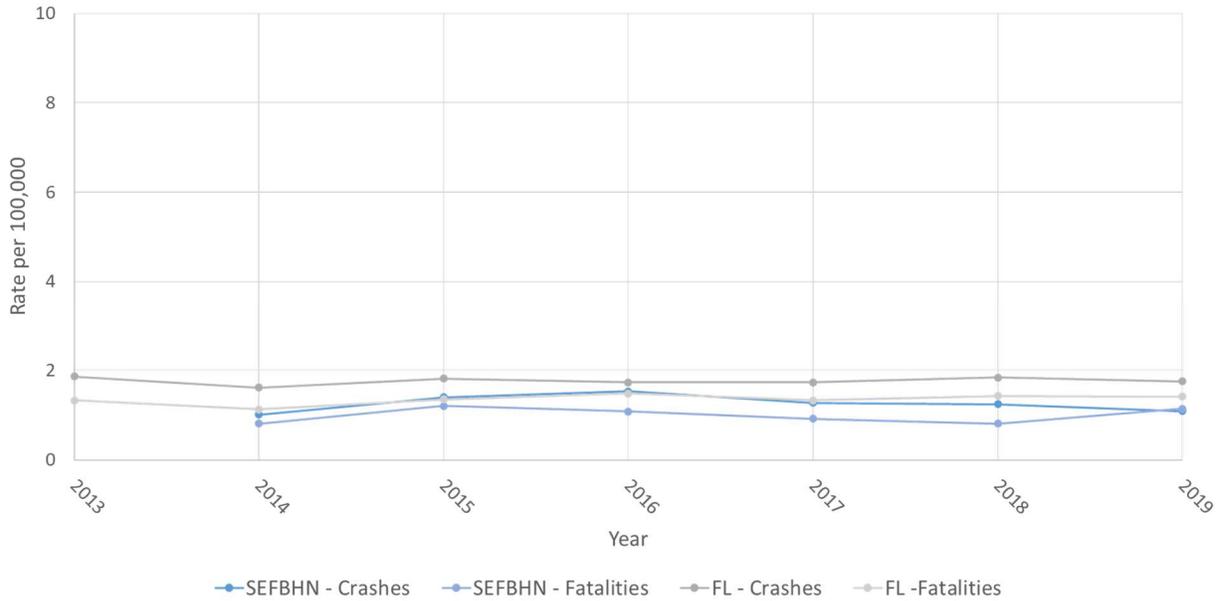


Figure 143. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Southeast Florida Behavioral Health Network, 2013 – 2019. Source: [FLHSMV](#).

The rates of alcohol and drug-involved MVC and resulting fatalities are not only the second-lowest in the state in Broward County but also trending downward over time, declining to 0.52 crashes and 0.42 fatalities per 100,000 population in 2019 (Figure 144).

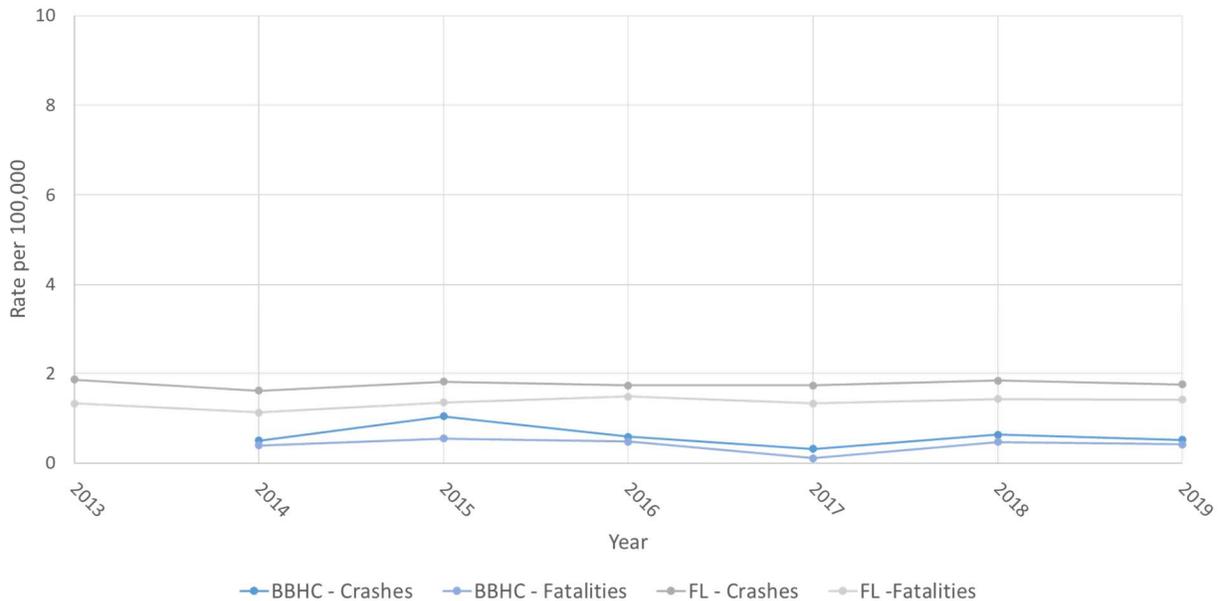


Figure 144. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and Broward Behavioral Health Coalition, 2013 – 2019. Source: [FLHSMV](#).

Though both the rates of alcohol and drug-involved MVC and resulting fatalities are trending upward overall for the period 2014 – 2019, the MER served by South Florida Behavioral Health Network, Inc. dba

Thriving Mind continues to have the lowest rates of both statewide (Figure 145). Both rates of alcohol and drug-involved MVC and resulting fatalities declined to 0.35 each per 100,000 population in 2019.

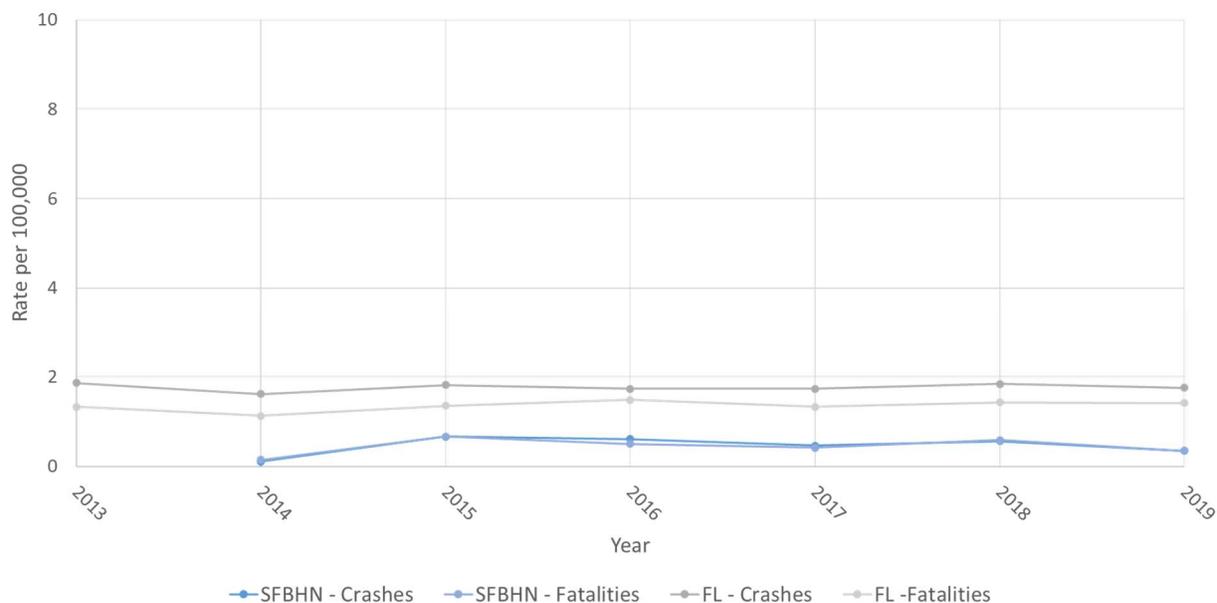


Figure 145. Alcohol and Drug Confirmed Crashes and Fatalities, Florida and South Florida Behavioral Health Network, Inc. Thriving Mind, 2013 – 2019. Source: [FLHSMV](#).

MORBIDITY

Though the use of some substances, such as opioids and stimulants, may be used to treat conditions such as acute pain and attention deficit disorder, the use of substances is associated with an increased risk of myriad poor health outcomes. One of these outcomes, overdose, is a direct result of substance use. Working up the injury pyramid (Figure 1), morbidity resulting directly from substance use is a consequence that occurs among a proportion of people who use substances. 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

A decline in emergency department visits due to poisoning (and drug poisoning) from 2017 to 2018 was observed in both FL and the US. This decline follows a four-year rise in ED visits in Florida, though rates in Florida have increased at a slower, steadier rate than in the nation as a whole (Figure 146). Based on data available for the latest three years, drug poisonings comprise the majority of poisonings overall.

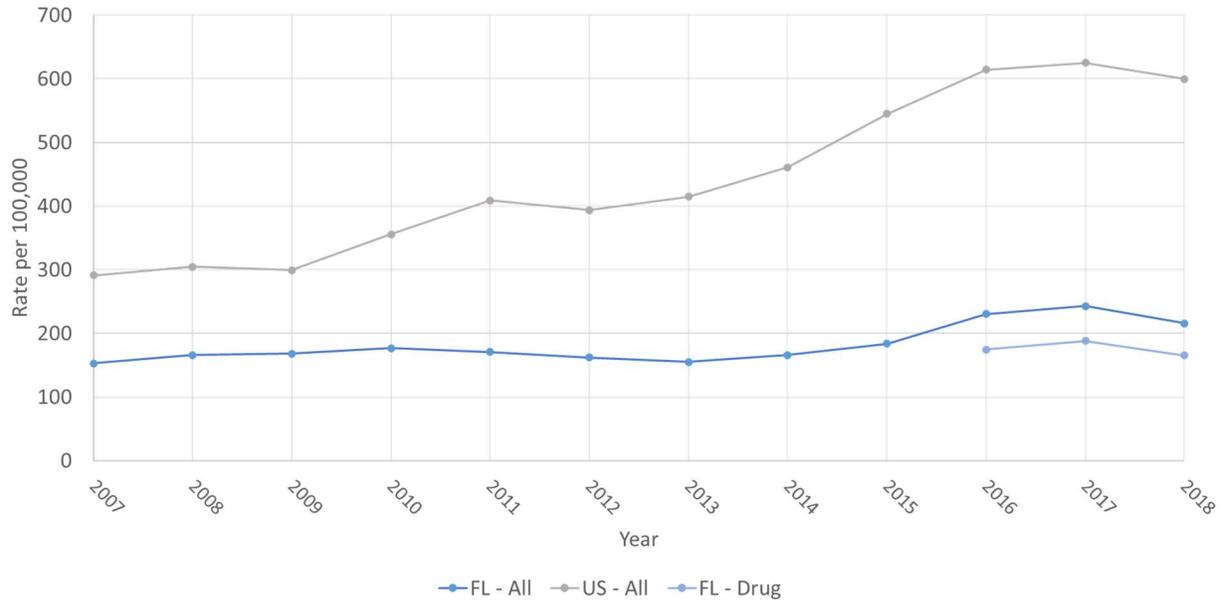


Figure 146. Emergency Department Visits due to Poisoning, Overall and Drug-specific, United States and Florida, 2007 – 2018. Source: [CDC WISQARS](#) and [FL AHCA](#).

Little variability was observed between the MERs, with a few minor exceptions (Figure 147). The rate of ED visits for poisoning increased considerably in the MER served by Southeast Florida Behavioral Health Network compared to the rest of the state in 2016 and 2017 but declined again in 2018. The MER served by South Florida Behavioral Health Network dba Thriving Mind had noticeably lower ED visits than the other MERs. The MERs served by Big Bend Community Based Care dba NWF Health and Central Florida Cares Health System experienced an uptick in ED visits in 2018, unlike the other regions.

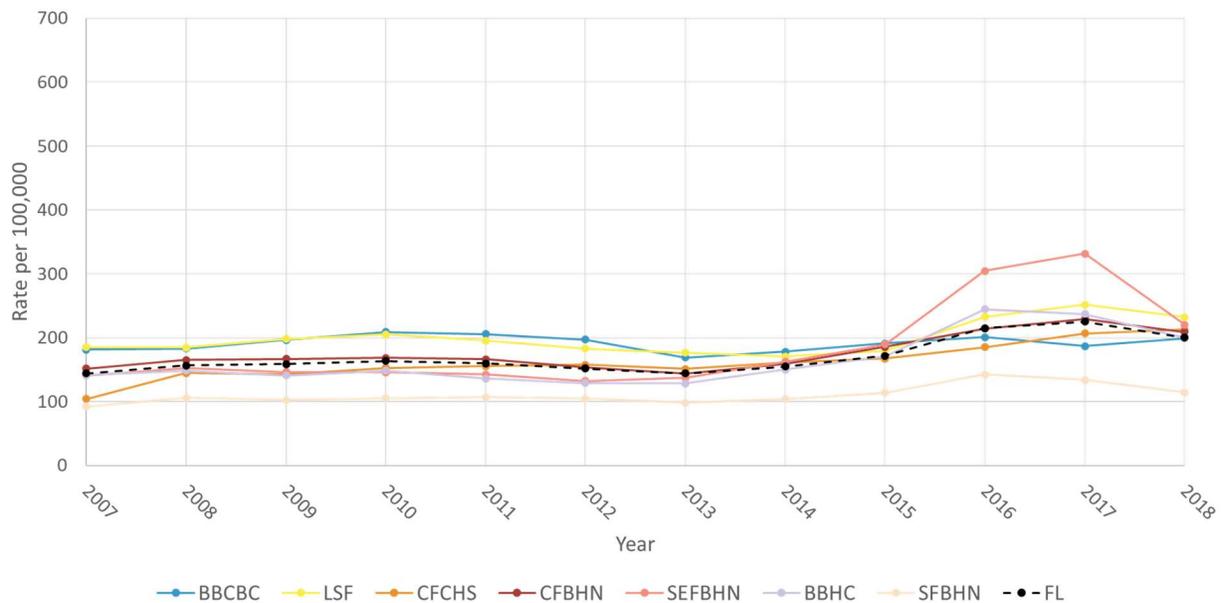


Figure 147. Emergency Department Visits due to Poisoning, Florida and Managing Entity Regions, 2007 – 2018. Source: [FL AHCA](#).

The patterns in overall poisonings in the MERs were driven by non-fatal drug overdoses (Figure 148).

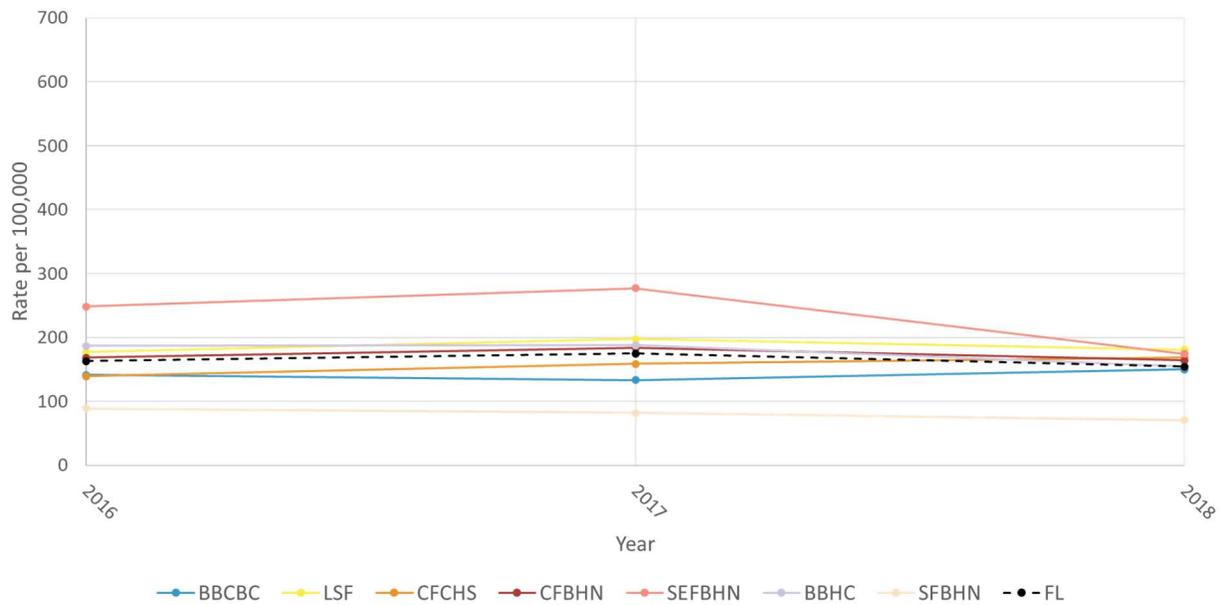


Figure 148. Emergency Department Visits due to Drug Poisoning, Florida and Managing Entity Regions, 2016 – 2018. Source: [FL AHCA](#).

The rate of ED visits per 100,000 population in the MER served by Big Bend Community Based Care (BBCBC) dba NWF Health was above the rate for the state overall for most of the period of observation (Figure 149). However, in 2016, the overall rate of emergency department visits for poisoning in Florida rose faster than the rate in the MER served by BBCBC. This gap widened when a decline in these overdoses occurred in the MER served by BBCBC in 2017. Yet, a subsequent rise in the rate of ED visits for poisoning in the region in 2018, brought the MER-specific rate back up to 199.6 ED visits for poisoning per 100,000 population, compared to 200.5 such visits per 100,000 population for Florida overall. Of these, 150.3 ED visits per 100,000 (75%) were due specifically to drug poisoning.

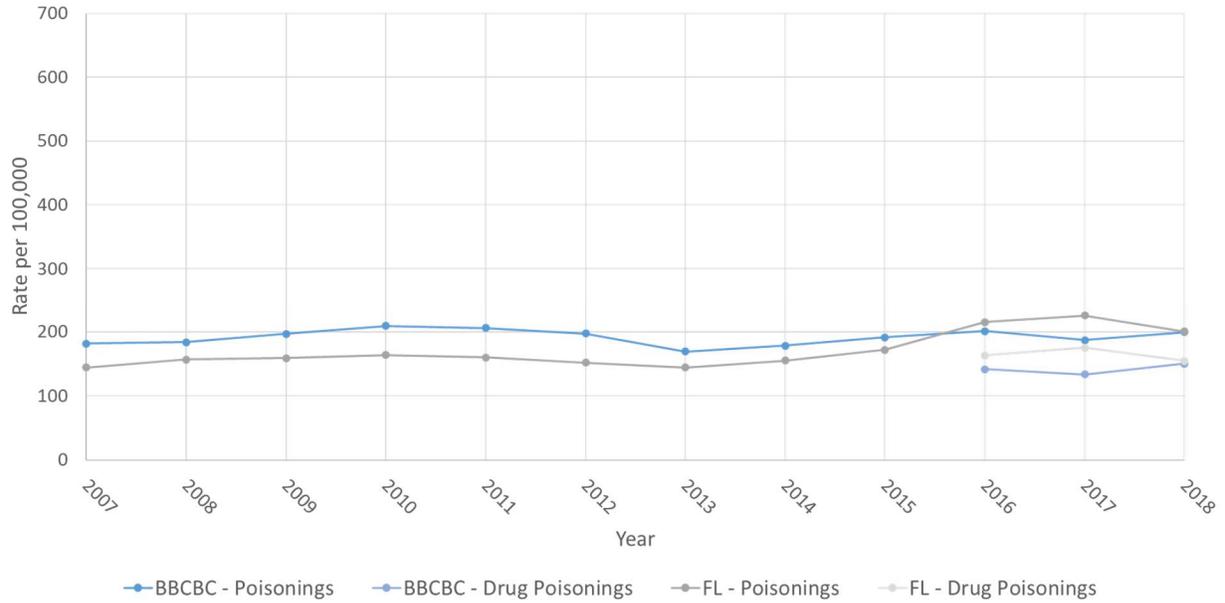


Figure 149. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Big Bend Community Based Care dba NWF Health, 2007 – 2018. Source: [FL AHCA](#).

In the MER served by Lutheran Services Florida, the rate of ED visits for poisoning has been just above the state rate, following a very similar pattern as the state overall over the time period observed, ending with 232.4 ED visits for poisoning per 100,000 population in 2018, of which 180.8 per 100,000 (78%) were ED visits specifically for non-fatal drug poisoning (Figure 150).

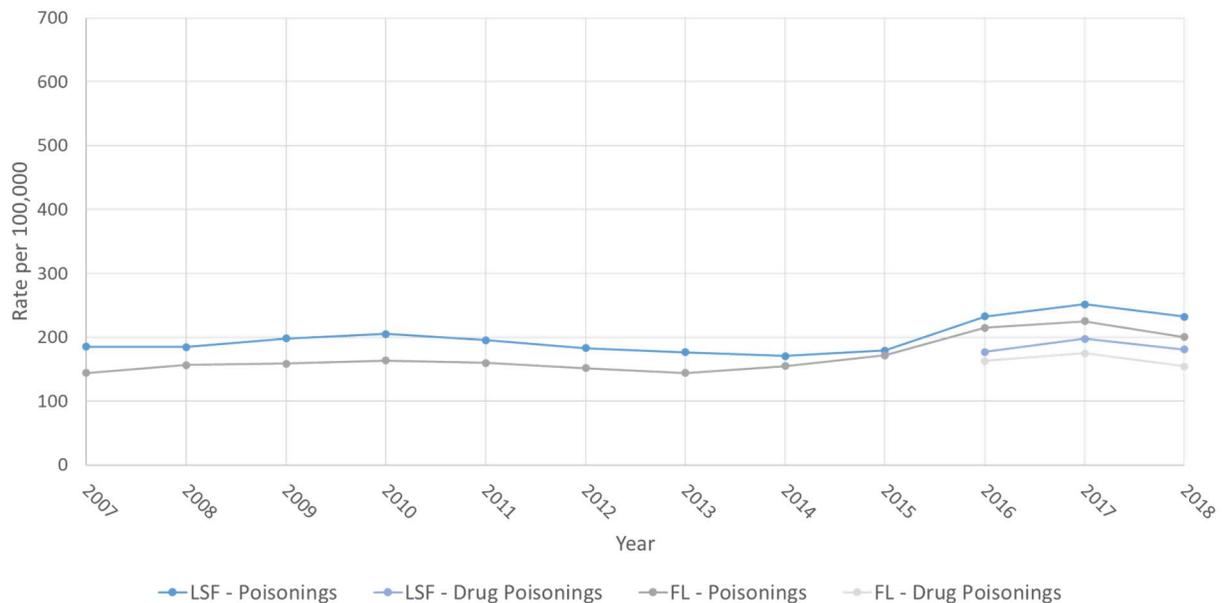


Figure 150. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Lutheran Services Florida, 2007 – 2018. Source: [FL AHCA](#).

Both MERs in the central part of the state experienced rates of ED visits due to poisoning that were comparable to the overall state rate (Figure 151 and Figure 152). As is true in all of the MERs, the majority of poisonings are due to non-fatal overdose, based on data from the latest years of reporting. In 2018, the rate of ED visit for poisoning in the MER served by Central Florida Behavioral Health Network, Inc. declined to 209.0 visits per 100,000 population, of which 164.3 visits per 100,000 (79%) were due to drug poisoning, specifically.

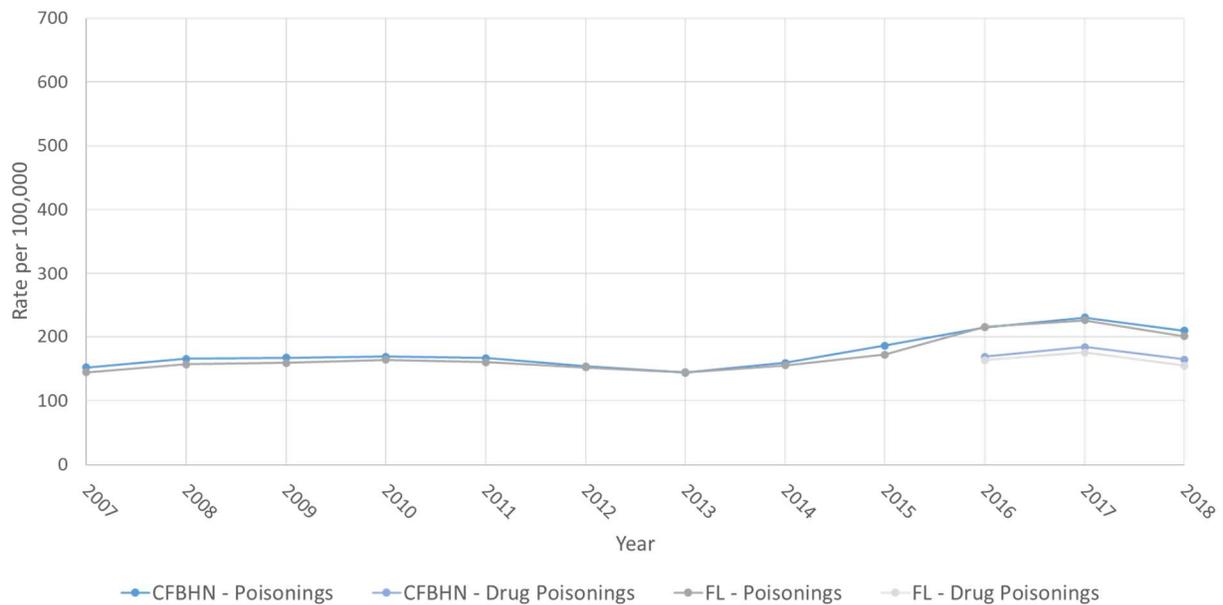


Figure 151. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Behavioral Health Network, Inc., 2007 – 2018. Source: [FL AHCA](#).

In the MER served by Central Florida Cares Health System, similar rates of ED visits per 100,000 population were observed (Figure 152). In this MER, 212.9 ED visits for poisoning per 100,000 population occurred in 2018, of which 79% (169.2 visits per 100,000) were for drug poisoning, specifically.

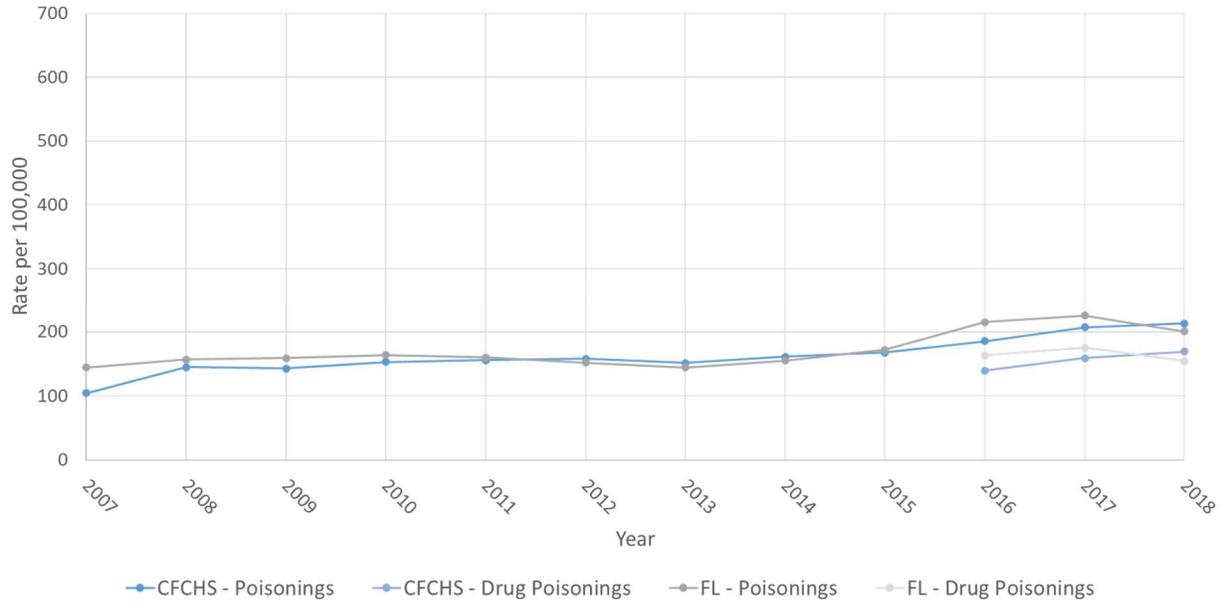


Figure 152. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Cares Health System, 2007 – 2018. Source: [FL AHCA](#).

Though rates of ED visits for poisoning in the MER served by the Southeast Florida Behavioral Health Network were very similar to rates for the state overall from 2007 through 2015, the MER-specific rate increased markedly in 2016 and again in 2017 (Figure 153). The rate of ED visits for poisoning did decline markedly in 2018 to a rate above, but much closer to that for the state, of 220.2 ED visits for poisoning per 100,000 population. The increase and subsequent decline in ED visits for poisoning was likely driven by the increase and subsequent decline in drug poisonings in the region, as the changes were parallel from 2016 through 2018, ending at a rate of 174.5 ED visits for drug poisoning per 100.000 (79%) for drug poisoning in 2018.

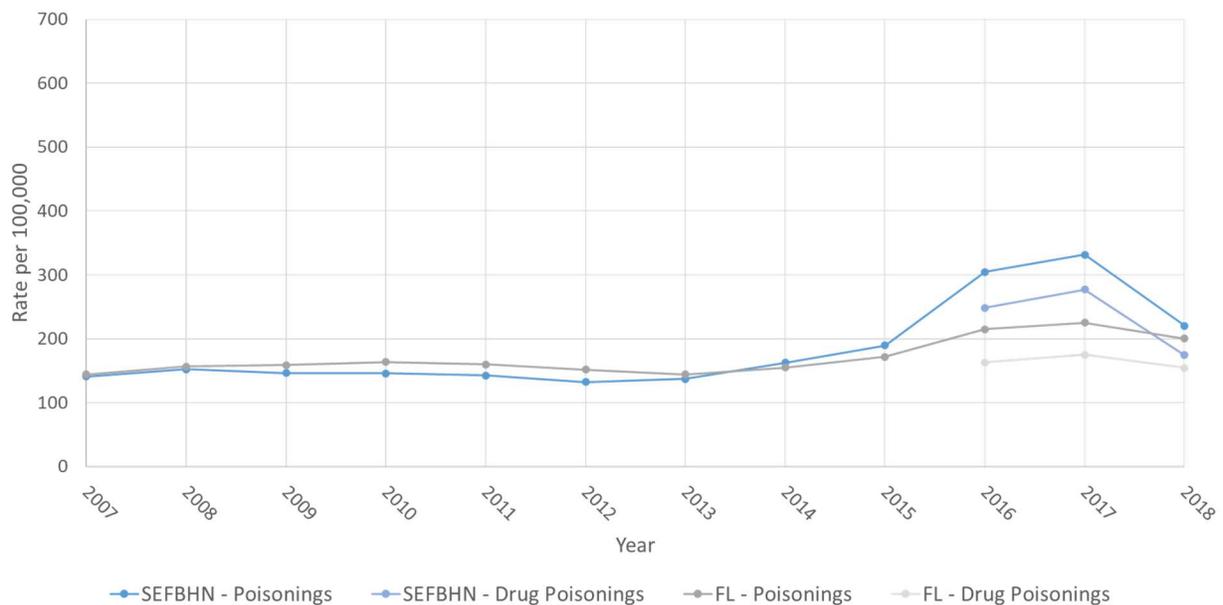


Figure 153. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Southeast Florida Behavioral Health Network, 2007 – 2018. Source: [FL AHCA](#).

Emergency department visits for poisoning in Broward County followed a similar pattern to those observed in central Florida, with rates tracking very closely to the Florida rate overall (Figure 154). In 2018, the rate of ED visit for poisoning in Broward County was 200.6 visits per 100,000 population, nearly the same as the state rate of 200.5 visits per 100,000 population. Of these, 154.5 visits per 100,000 population (77%) were due to drug poisoning (versus 154.3 visits per 100,000 (77%) for Florida overall).

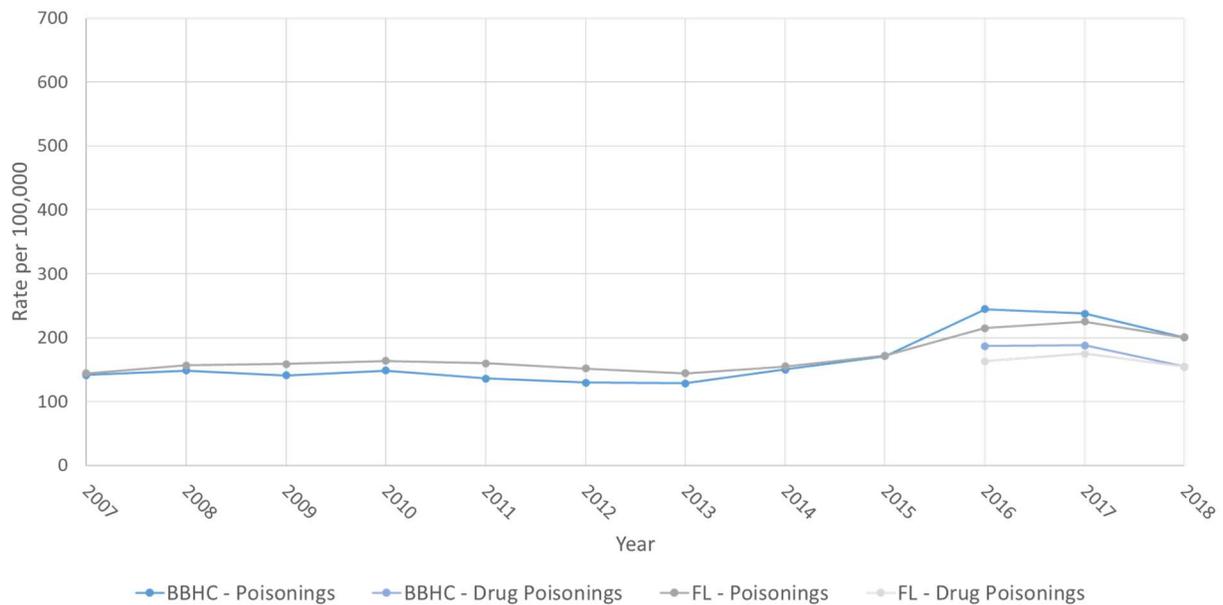


Figure 154. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and Broward Behavioral Health Coalition, 2007 – 2018. Source: [FL AHCA](#).

The only MER in which ED visits occurred consistently less frequently than in the state overall was the southernmost region served by South Florida Behavioral Health Network, Inc. dba Thriving Mind (Figure 155). For poisoning overall, 114.6 ED visits per 100,000 population occurred in 2018, of which 70.7 visits per 100,000 population (62%) were due to drug poisoning.

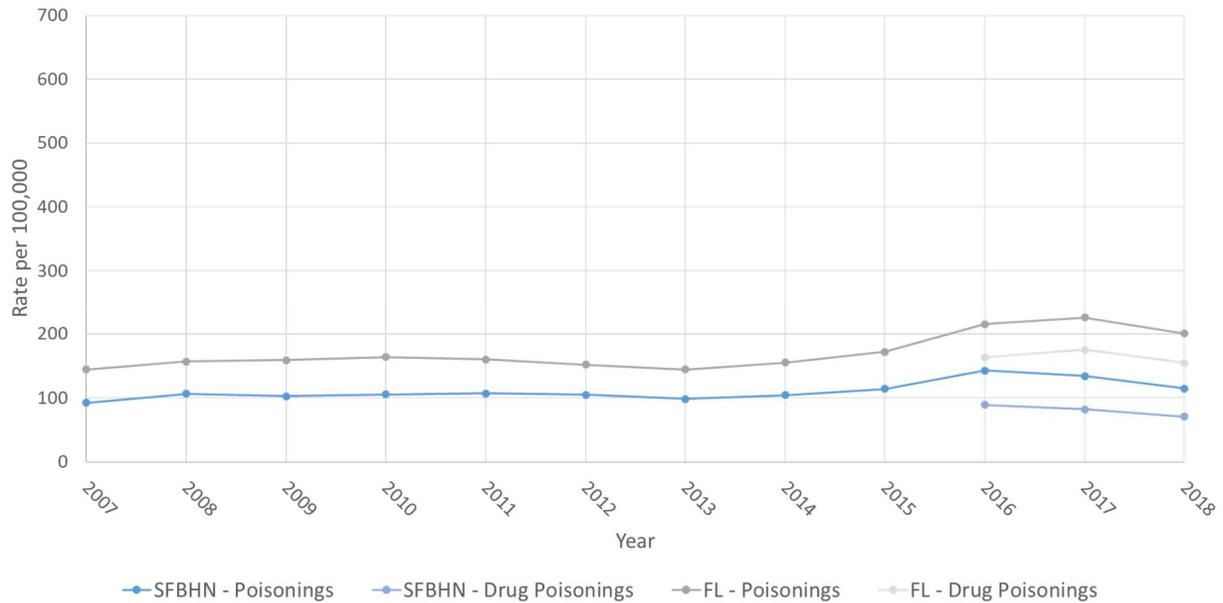


Figure 155. Emergency Department Visits due to Poisoning, Overall & Drug-Specific, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2007 – 2018. Source: [FL AHCA](#).

HOSPITALIZATIONS

Poisoning hospitalizations – comprised primarily of drug poisonings – declined in the two most recent years of data (2017 – 2018) in Florida, a trend also seen at the national level (Figure 156). Like emergency department visits to treat non-fatal poisoning, poisoning hospitalization rates in Florida have been more stable over time than those for the nation as a whole. The gap between the national rate and the rate in Florida was about the same in both 2017 and 2018, following a narrowing in the previous year, with Florida experiencing fewer hospitalizations per 100,000 population than the nation.

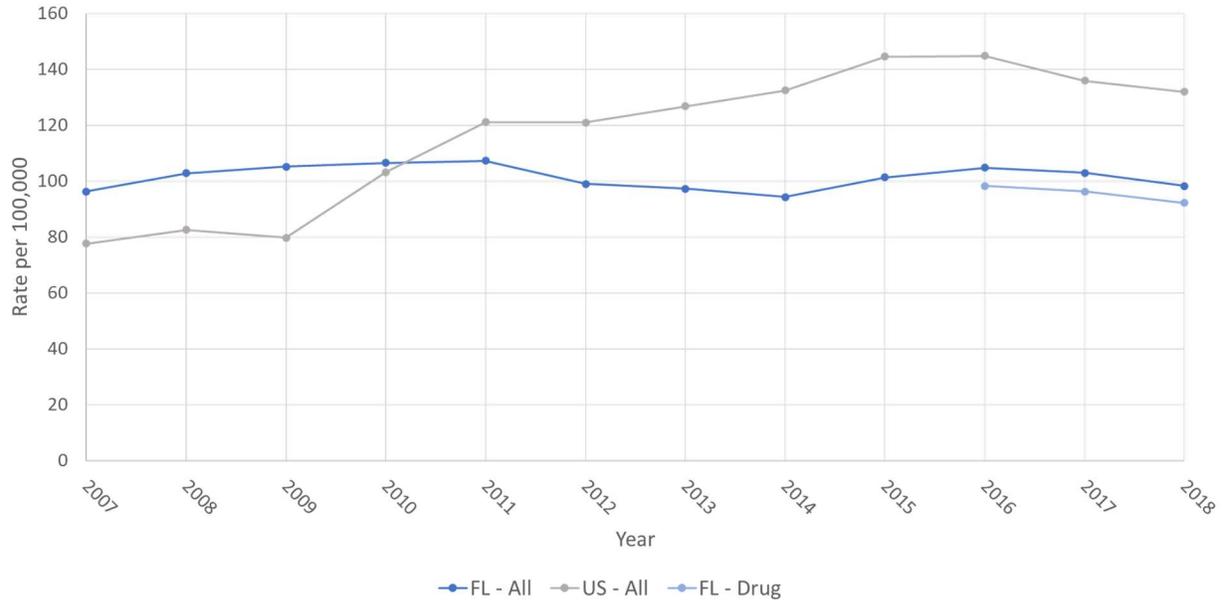


Figure 156. Hospitalization due to Poisoning, Overall and Drug-specific, United States and Florida, 2007 – 2018. Source: [CDC WISQARS](#) and [FL AHCA](#).

Variability in the MER-specific rates is observed for hospitalizations, with poisoning hospitalization rates for the MERs served by LSF and CFBHN exceeding the state rate (Figure 157). The rate for the MER served by SFBHN is the lowest.

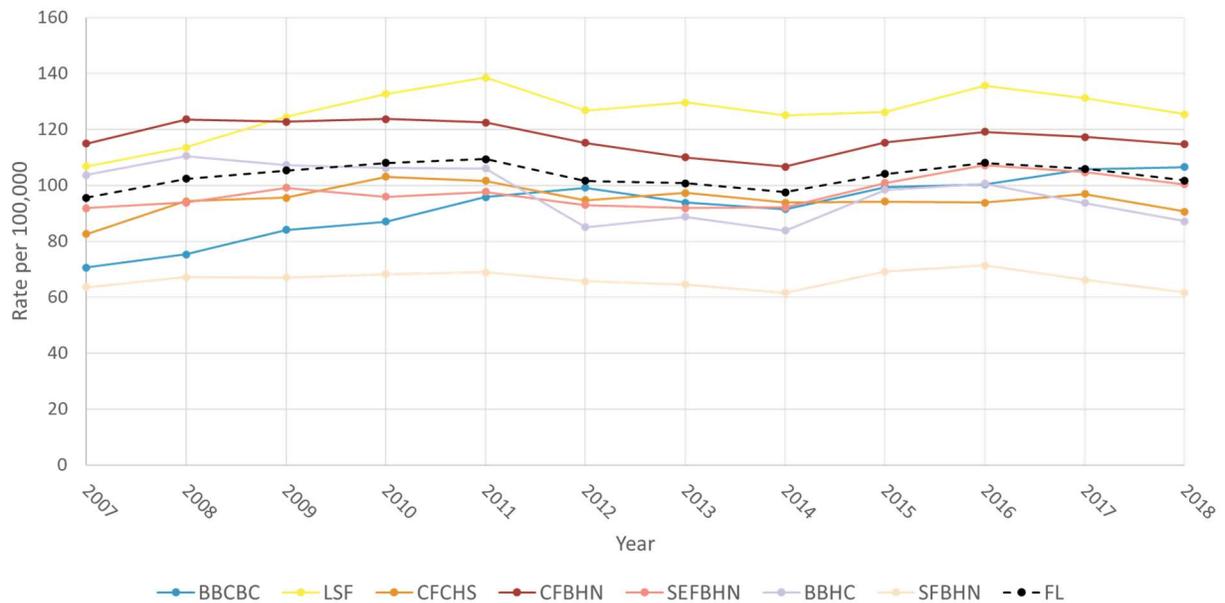


Figure 157. Hospitalization due to Poisoning, Florida and Managing Entity Regions, 2007 – 2018. Source: [FL AHCA](#).

A similar pattern is observed for the MER-specific rates of hospitalization for drug poisoning data available for the years 2016 through 2018 (Figure 158).

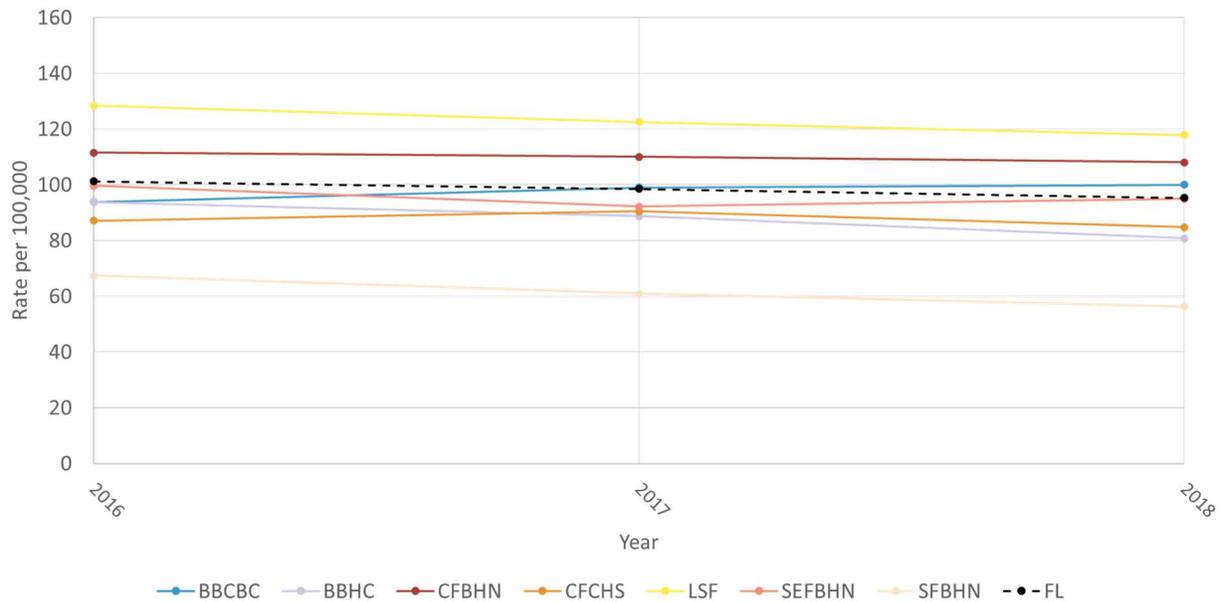


Figure 158. Hospitalization due to Drug Poisoning, Florida and Managing Entity Regions, 2016 – 2018. Source: [FL AHCA](#).

Unlike the MER-specific patterns of ED visits, the trends in poisoning hospitalizations over time often differ in the MERs compared to the state overall. The MER served by Big Bend Community Based Care (BBCBC) dba NWF Health had rates of poisoning hospitalization below that of the state as a whole for most of the period of observation, though the rate increased more quickly 2007 through 2012, shrinking the gap between the two (Figure 159). Then, two subsequent years of increase in the MER served by BBCBC, while the state rate declined, put the MER-specific rate above that of the state overall. In 2018, the rate of poisoning hospitalization in the MER served by BBCBC was 106.5 hospitalizations per 100,000 population, of which, 100.0 hospitalizations per 100,000 (94%) were for drug poisonings compared to 101.7 and 95.3 hospitalizations per 100,000 population, respectively, statewide.

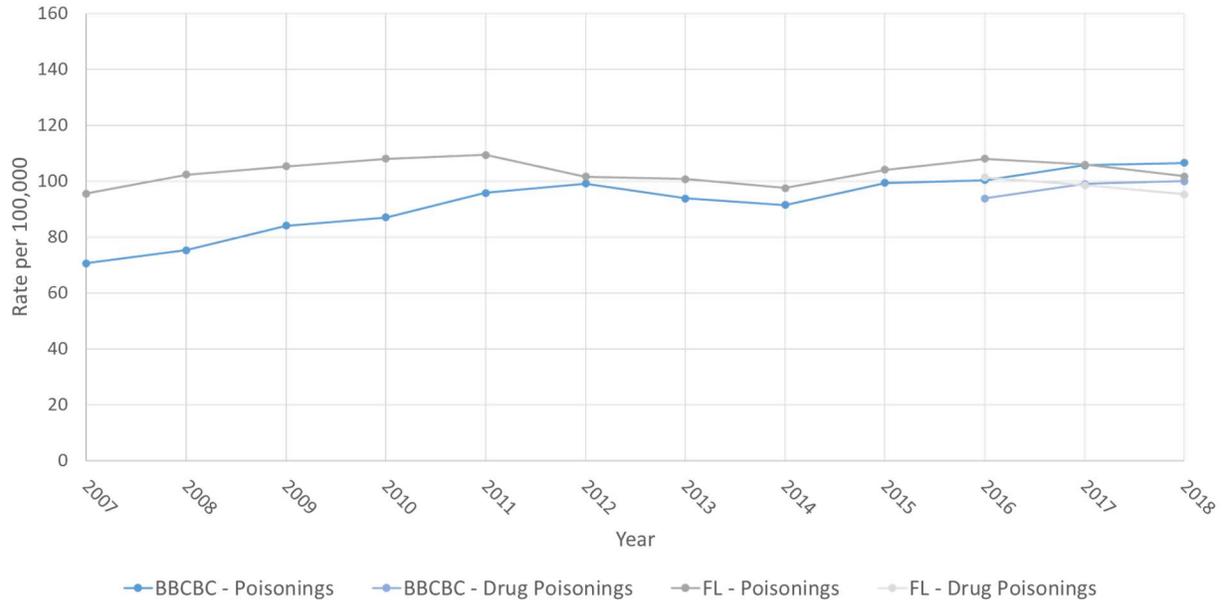


Figure 159. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Big Bend Community Based Care dba NWF Health, 2007 – 2018. Source: [FL AHCA](#).

In the MER served by Lutheran Services Florida (LSF), hospitalization rates for poisoning were above the state rate throughout the period of observation (Figure 160), with the gap in rates widening early in the period and then remaining fairly consistent since 2011. The MER served by LSF did, however, experience a decline in poisoning hospitalization in the two most recent years for which we have data. In 2018, the rates of poisoning and drug-poisoning hospitalization in the MER served by LSF were 125.5 and 117.9 (94%) hospitalizations per 100,000 population.

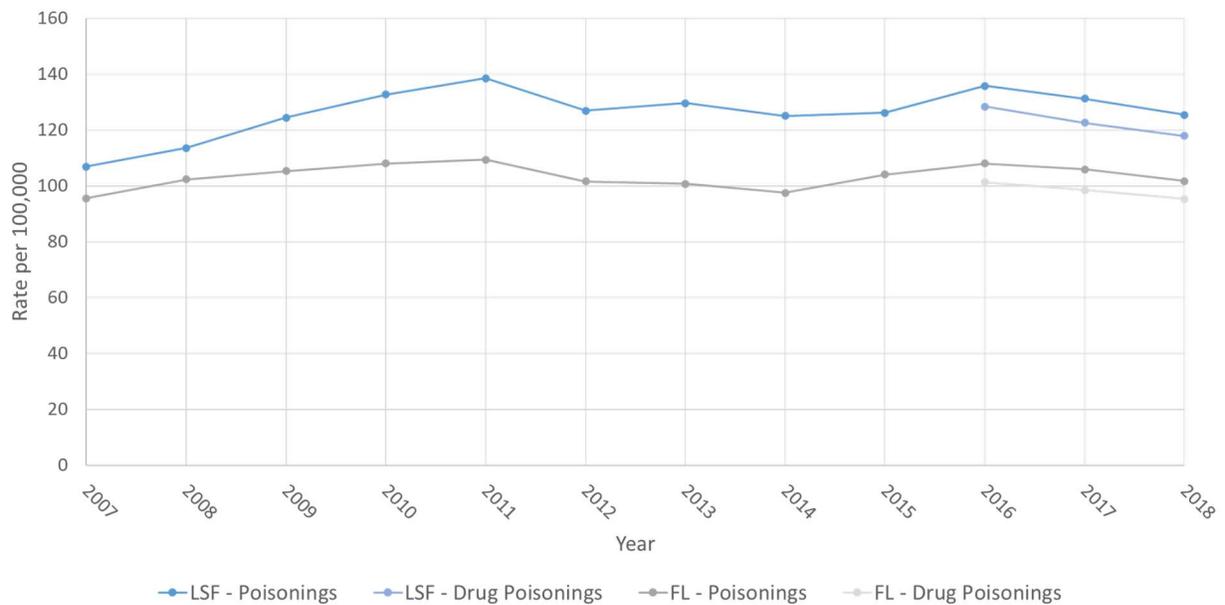


Figure 160. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Lutheran Services Florida, 2007 – 2018. Source: [FL AHCA](#).

Hospitalization rates in the MER served by Central Florida Behavioral Health Network, Inc. (CFBHN) were also higher than rates for the state overall, though a similar pattern over time was observed (Figure 161). The MER served by CFBHN also saw a decline in rates in 2017 and 2018, ending with rates of poisoning and drug-poisoning hospitalization of 114.7 and 108.0 (94%) hospitalizations per 100,000 in 2018.

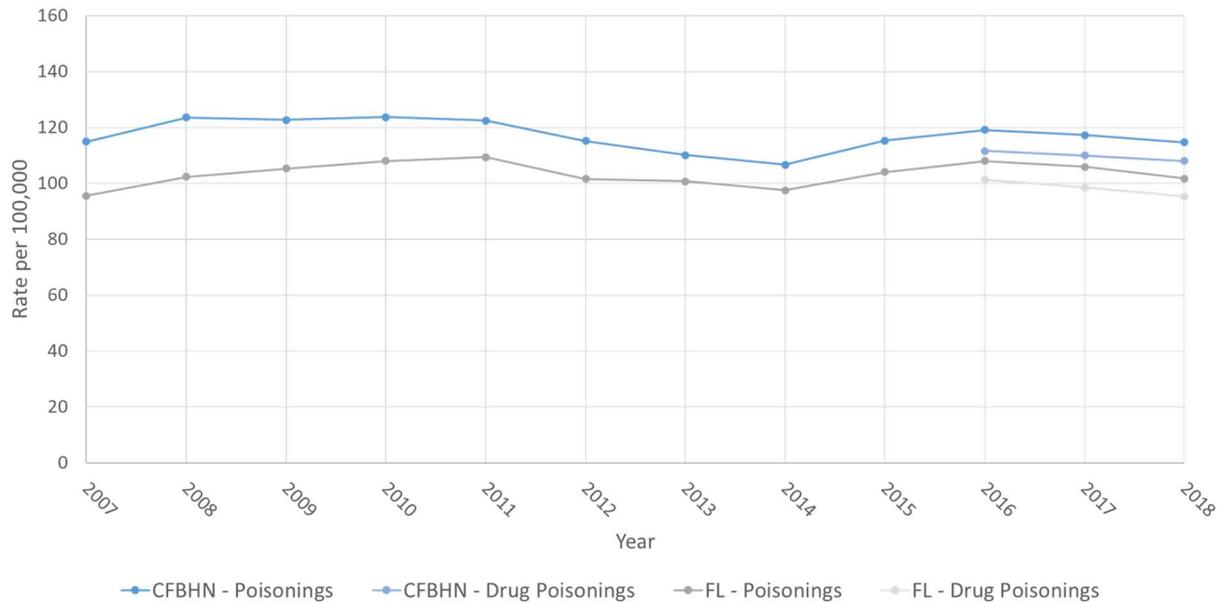


Figure 161. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Behavioral Health Network, Inc., 2007 – 2018. Source: [FL AHCA](#).

Rates of poisoning and drug-poisoning hospitalization in the MER served by Central Florida Cares Health System (CFCHS) have been lower than the state overall throughout this period, with the gap in rates widening slightly in the most recent years (Figure 162). Rates of poisoning and drug-poisoning hospitalization declined for a second year to 90.6 and 84.8 (94%) hospitalizations per 100,000 population in 2018.

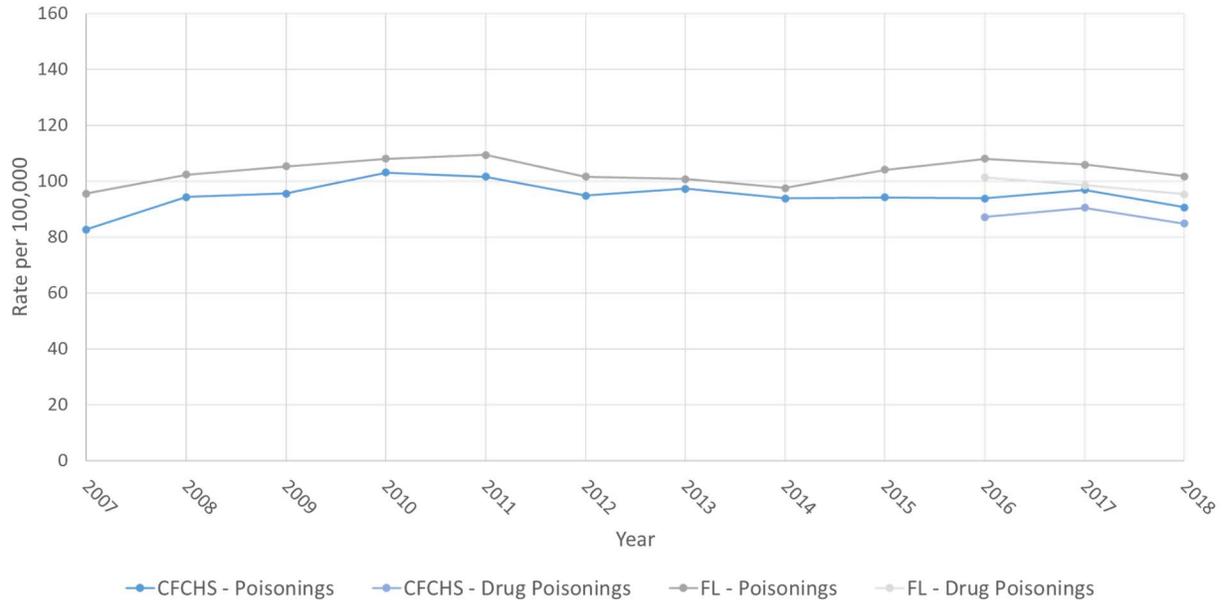


Figure 162. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Central Florida Care Health System, 2007 – 2018. Source: [FL AHCA](#).

The rates of poisoning hospitalization in the MER served by the Southeast Florida Behavioral Health Network (SEFBHN) were below those for the state for much of the period, but larger increases in rates from 2014 – 2016 nearly closed the gap between MER-specific and state rates (Figure 163). This is the only MER in which the proportion of poisoning hospitalization comprised of drug poisonings changed by more than a percentage point over the period 2016 – 2018. The rates of poisoning and drug-poisoning hospitalization were 100.4 and 94.9 (95%) hospitalizations per 100,000 population, respectively, in 2018, just below the state rates of 101.7 and 95.3 (94%) hospitalizations per 100,000 population.

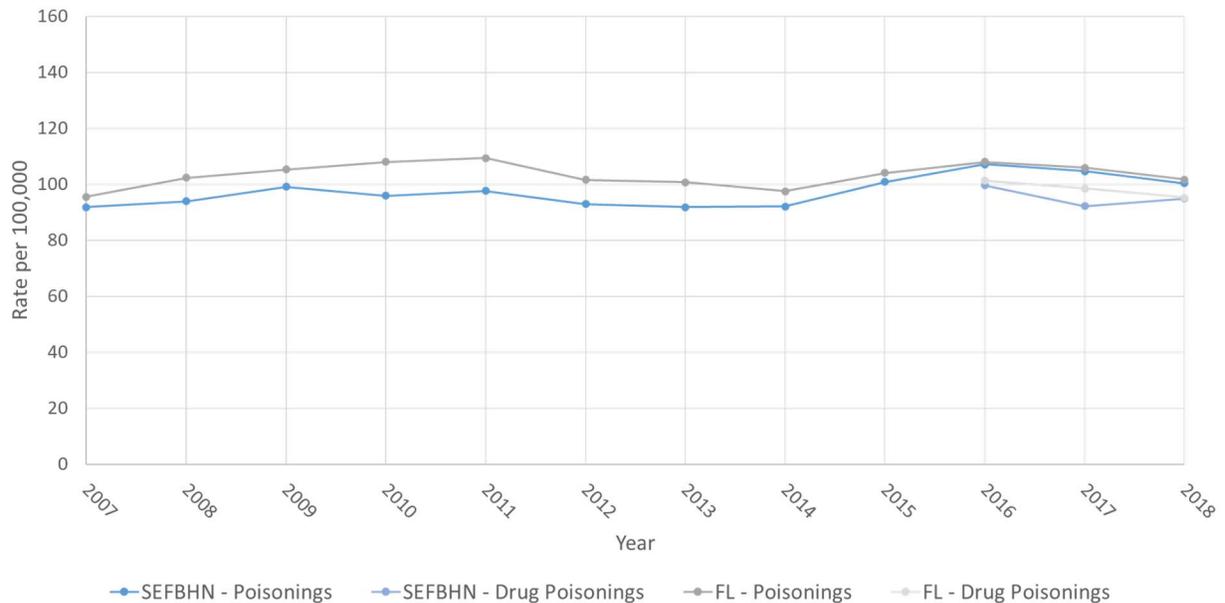


Figure 163. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Southeast Florida Behavioral Health Network, 2007 – 2018. Source: [FL AHCA](#).

Broward County began the period of observation with poisoning hospitalization rates above those of the state, but the MER-specific rate declined when the state rates increased from 2009 to 2010, resulting in a rate below the state rate (Figure 164). Though the trend over time in Broward County has differed compared to the state overall, the rate of poisoning hospitalization has remained below the state rate through 2018. Indeed, recent steeper declines in Broward County have resulted in a wider gap between its rate and the rate of Florida overall. In 2018, the rates of poisoning and drug-poisoning hospitalization declined to 87.2 and 80.8 (93%) hospitalizations per 100,000 population.

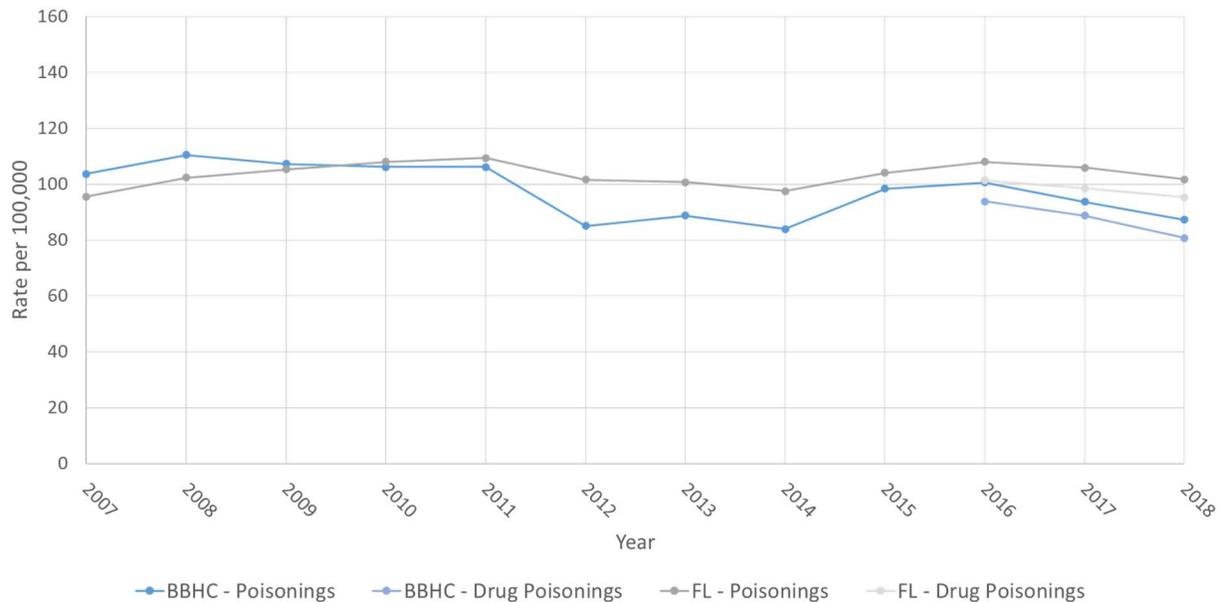


Figure 164. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and Broward Behavioral Health Coalition, 2007 – 2018. Source: [FL AHCA](#).

As was shown with emergency department visits as well, the rates of poisoning and drug-poisoning hospitalization in the MER served by South Florida Behavioral Health Network, Inc. (SFBHN) dba Thriving Mind were markedly lower than in the state overall (Figure 165). The trend over time, however, has mirrored that of the state overall. In 2018, the rates of poisoning and drug-poisoning hospitalization declined for the second year in a row to 61.7 and 56.3 (91%) hospitalizations per 100,000 population, the lowest rates in the state.

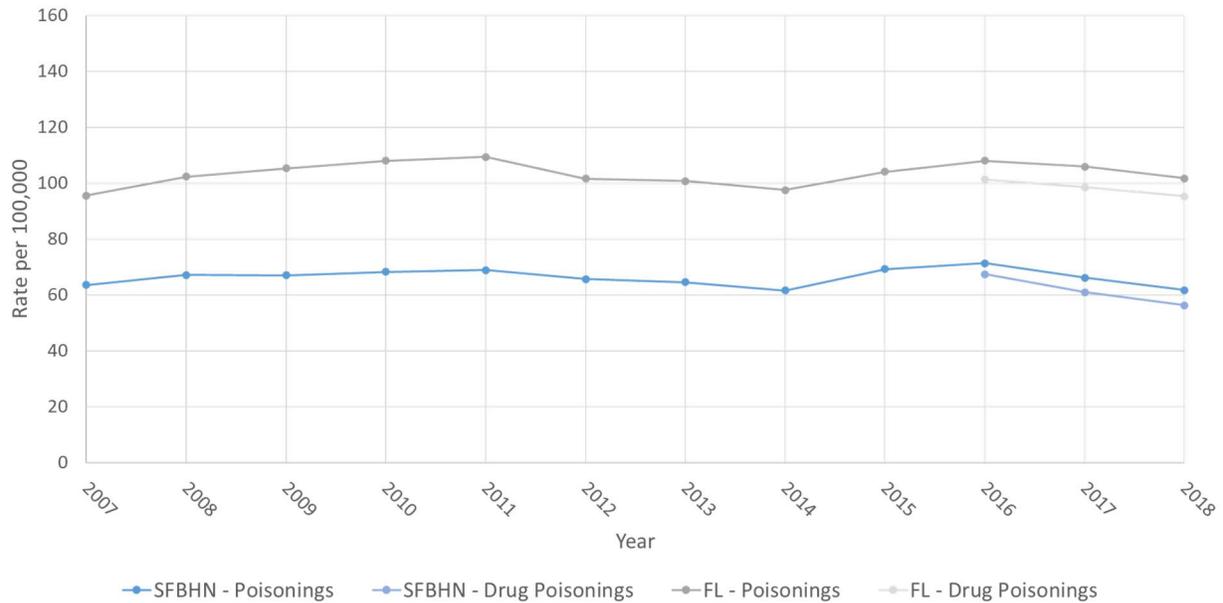


Figure 165. Hospitalization due to Poisoning, Overall & Drug-Specific, Florida and South Florida Behavioral Health Network, Inc. dba Thriving Mind, 2007 – 2018. Source: [FLAHCA](#).

MORTALITY: FATAL POISONING

At the top of the injury pyramid (Figure 1), are those direct consequences of substance use with the most severe health outcome, fatal drug overdose. Following a four-year increase in the rate of drug poisoning death in the state of Florida, the state, as well as the nation, saw a decline in drug poisoning mortality in 2018 (Figure 166). However, the mortality rate for 2018 remains over three times the rate observed for 1999. Early in the current epidemic of fatal drug poisonings, the mortality in Florida exceeded that of the US overall. After a decline in the early 2010s, during which the mortality rate in Florida fell below that of the nation, the rate in Florida began trending up again. For the first time in nearly two decades, the rate of fatal drug poisonings in the nation declined; the same decline occurred in FL. However, provisional estimates for 2019 suggest that these deaths rose again in 2019 (O'Donnell, et al, 2020).

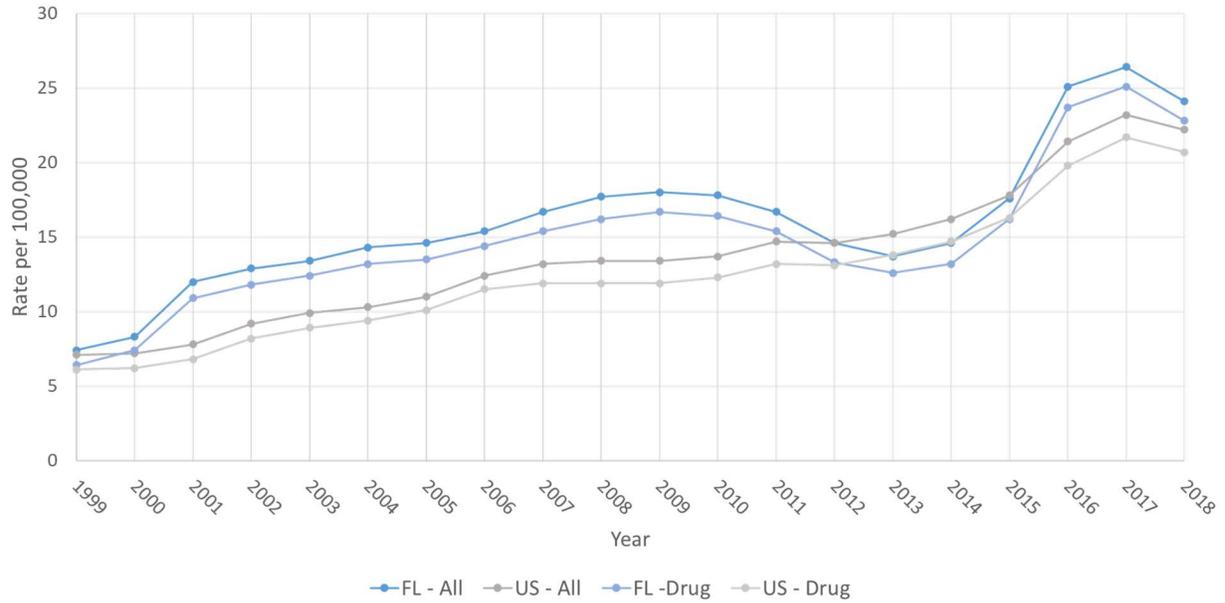


Figure 166. Age-Adjusted Mortality Rate, Overall and Drug Poisoning, United States and Florida, 1999 – 2018. Source: [CDC WONDER](#).

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 (Figure 167). However, the 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 (Figures 168 – 170) (Ciccarone, 2019).

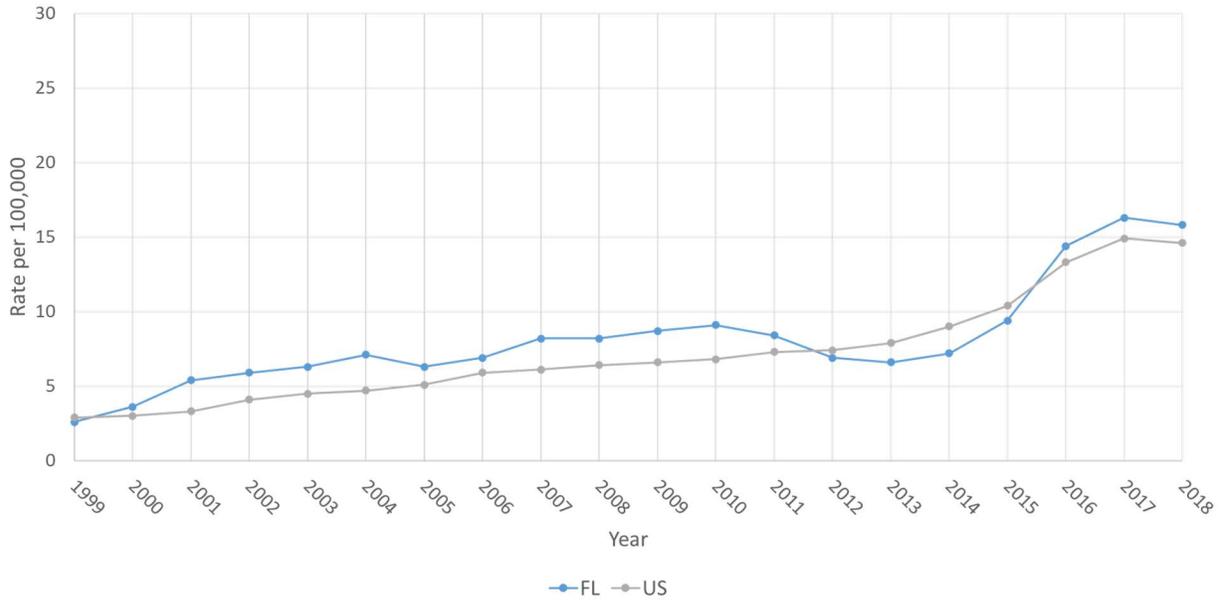


Figure 167. Age-Adjusted Mortality Rate, Any Opioid, United States and Florida, 1999 – 2018. Source: [CDC WONDER](#).

Deaths due to natural or semi-synthetic opioids peaked in 2010 in Florida and steadily declined through 2014, after which these deaths again began to rise (Figure 168). Unlike the US that saw a decline in these deaths from 2017 to 2018, the age-adjusted rate of these deaths remained the same in Florida in 2018 and 2017 at 5.4 deaths per 100,000 population.

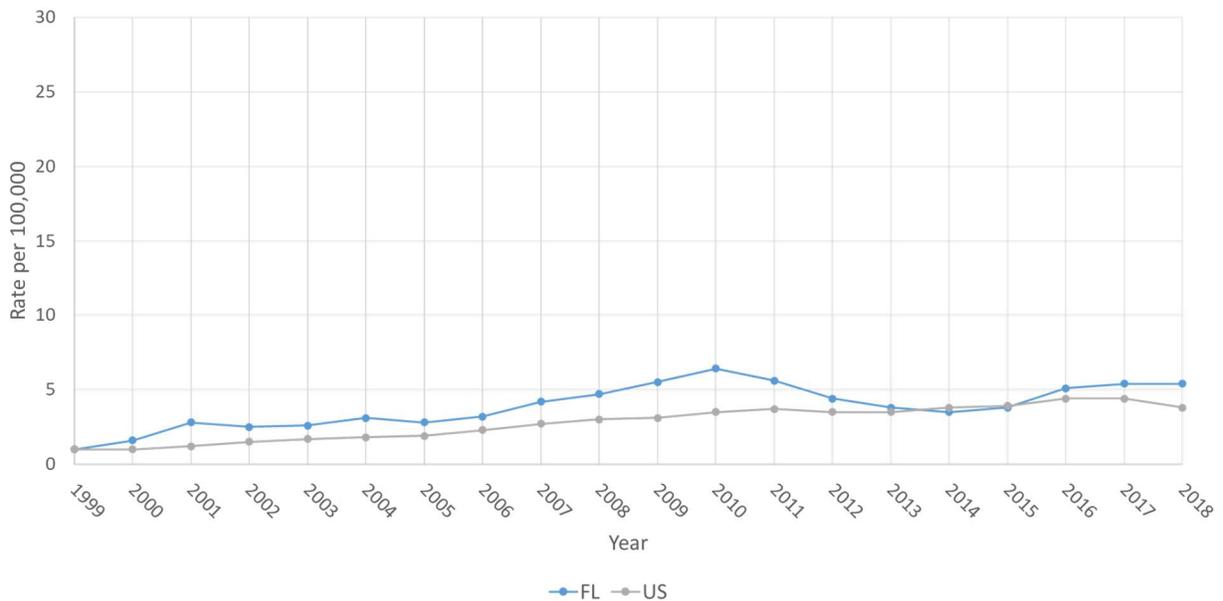


Figure 168. Age-Adjusted Mortality Rate, Natural or Semi-Synthetic Opioid, United States and Florida, 1999 – 2018. Source: [CDC WONDER](#).

Peaking later, deaths caused by heroin rose at a similar rate in Florida and the US overall, reaching the highest rates in 2016 and 2017 for both the state and nation (Figure 169). The heroin-specific death rate declined in both Florida and the US in 2018 to 4.7 and 3.5 deaths per 100,000 population, respectively.

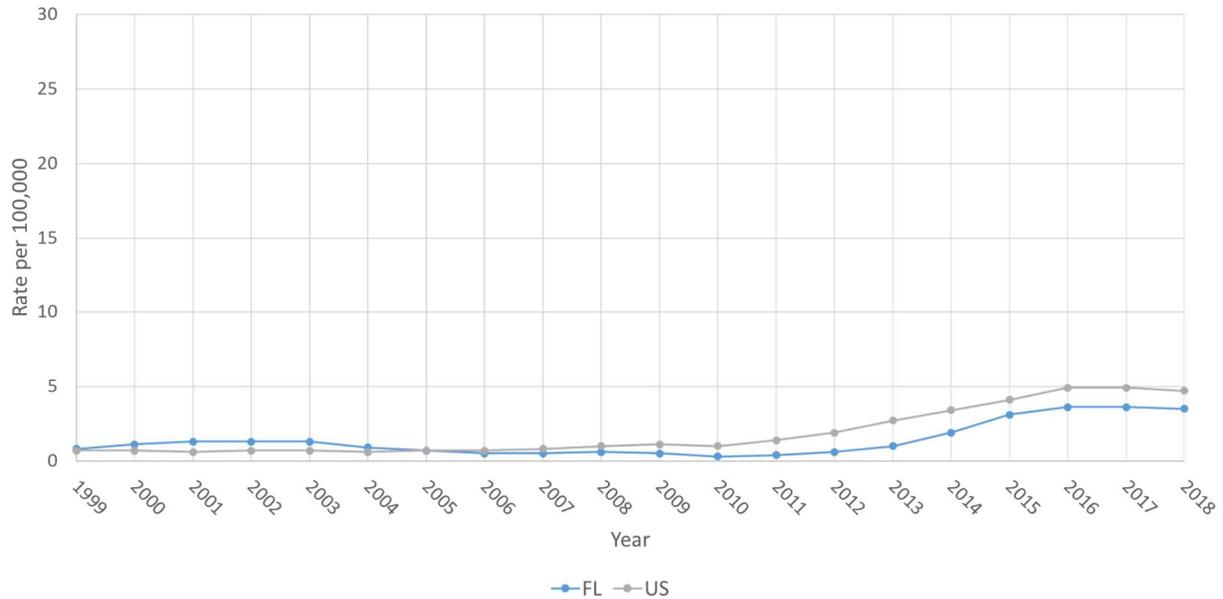


Figure 169. Age-Adjusted Mortality Rate, Heroin, United States and Florida, 1999 – 2018.
Source: [CDC WONDER](#).

Increases in deaths due to synthetic opioids excluding methadone, which includes clandestine-made synthetic fentanyl, began still later (Figure 170). Though Florida did experience a decline in these deaths from 11 deaths per 100,000 population in 2017 to 10.7 deaths per 100,000 in 2018, the same decline did not occur in the nation as a whole, with rates increasing from 9.0 deaths per 100,000 in 2017 to 9.9 deaths per 100,000 population in 2018.

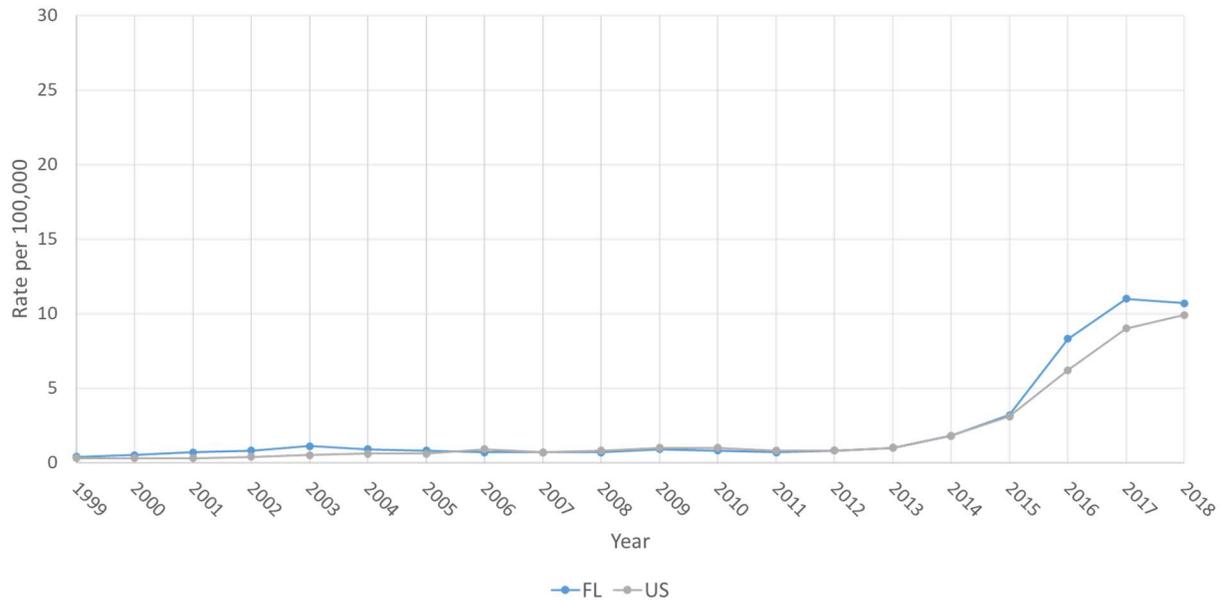


Figure 170. Age-Adjusted Mortality Rate, Synthetic Opioid*, United States and Florida, 1999 –2018. *Excludes Methadone. Source: [CDC WONDER](#).

STIMULANTS

Fatal drug poisonings due to stimulants have been increasing recently across the nation as well. Florida has experienced a nearly parallel rise with the US, experiencing rates similar to that of the nation as a whole for both cocaine and psychostimulants (Figure 171 and Figure 172). Cocaine-caused deaths rose for much of the first decade of the 21st century, ending the decade with a return to lower rates for a few years. However, rates began to rise again beginning in 2013. Rates of cocaine-caused death 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. The rate of cocaine-caused death in Florida was 6.0 per 100,000 population in 2018 compared to only 4.5 deaths per 100,000 nationwide.

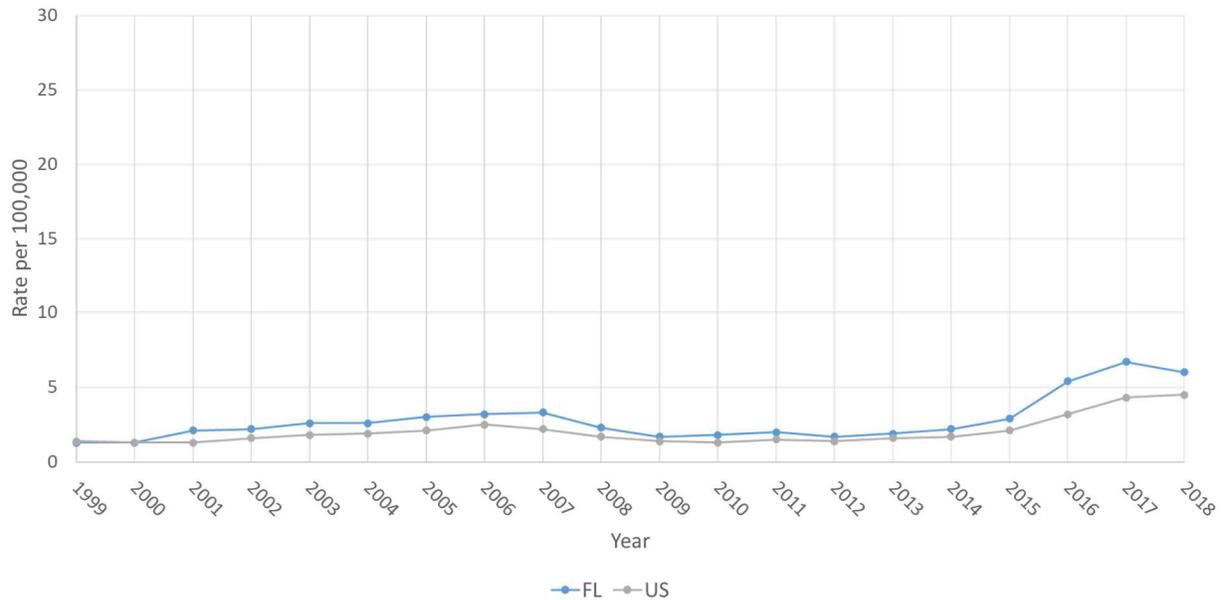


Figure 171. Age-Adjusted Mortality Rate, Cocaine, United States and Florida, 1999 – 2018.

Source: [CDC WONDER](#).

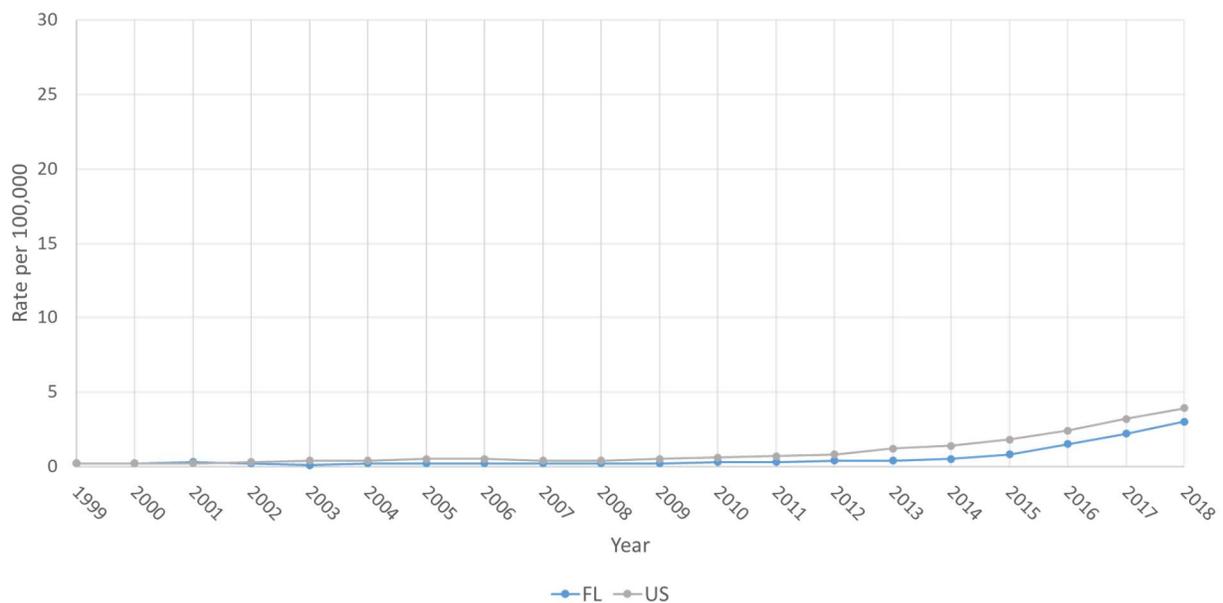


Figure 172. Age-Adjusted Mortality Rate, Psychostimulants, United States and Florida, 1999 – 2018. *Excludes Cocaine. Source: [CDC WONDER](#).

Source: [CDC WONDER](#).

In addition to cocaine deaths being on the rise, death due to other stimulants have also risen in recent years (Figure 172). Though the rates of death due to psychostimulants in the US and Florida were nearly identical early in the period, the US rates rose faster than Florida rates. Both the US and Florida experienced a plateau in the mortality rate due to psychostimulants from about 2003 through 2009, followed by steady increases that have accelerated in recent years. In Florida, the mortality rate for psychostimulants in 2018 (3.0 deaths per 100,000 population) is fifteen times the mortality in 2009 of 0.2 deaths per 100,000 population.

ALCOHOL

Fatal drug poisonings due to alcohol comprise a minority of poisoning deaths, and the incidence of these deaths has remained largely unchanged over the last decade (Figure 173). Poisonings are a fraction of the deaths that can be directly or indirectly attributable to alcohol use (Figure 117 – Figure 118, Figure 173 – Figure 174). For example, the rate of death due to motor vehicle crash that involved alcohol was 1.78 deaths per 100,000 population, compared to mortality rate for alcohol poisoning of only 0.5 deaths per 100,000 population in the same year.

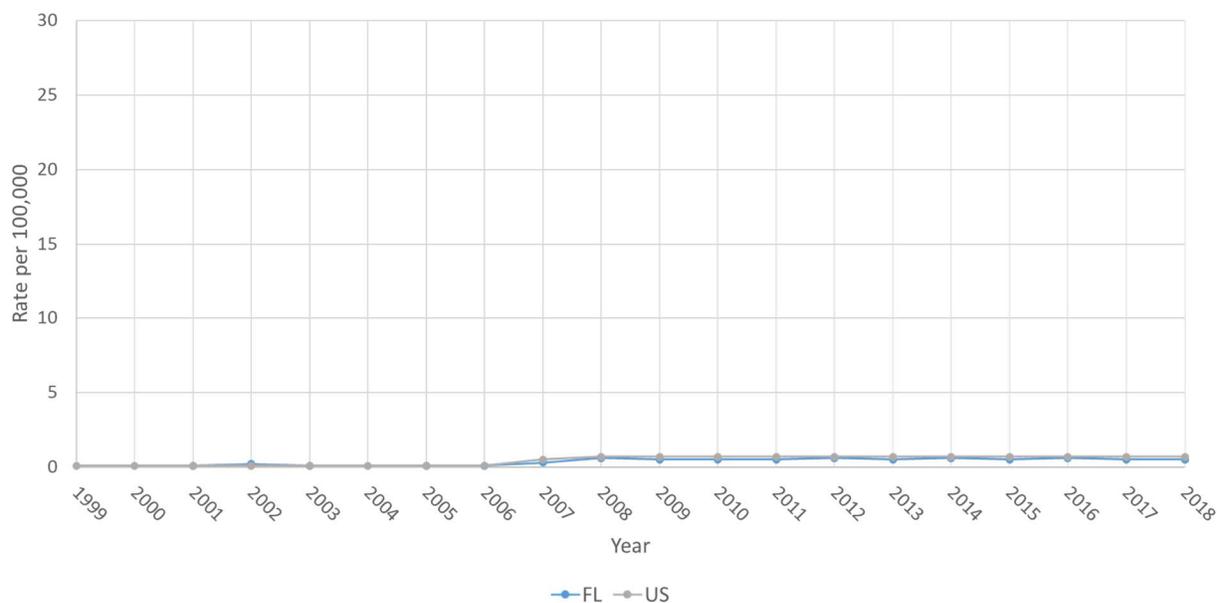


Figure 173. Age-Adjusted Mortality Rate, Alcohol Poisoning, United States and Florida, 1999 – 2018. Source: [CDC WONDER](#).

Note that the scale of the y-axis in Figure 174 differs from that of Figure 173. The y-axis used in Figure 173 is the same as that used for other substance-specific mortality rates to allow for comparison. Due to the low rates of fatal alcohol poisoning, the rates are also shown with a smaller range so that patterns can be more easily examined (Figure 174). Following a near plateau of the mortality rate from 1999 through 2006, rates of alcohol poisoning increased both nationally and in Florida over the next two years, and have remained stable throughout the subsequent decade, ending in 2018 with mortality rates of 0.7 deaths per 100,000 population nationally and 0.5 deaths per 100,000 population statewide.

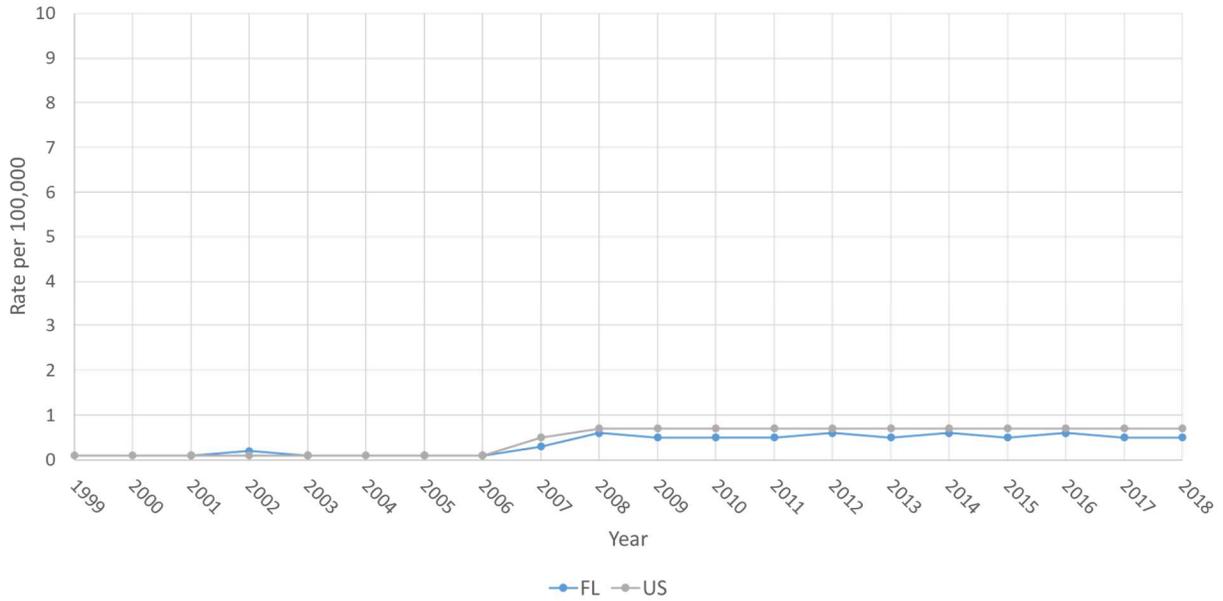


Figure 174. Age-Adjusted Mortality Rate, Alcohol Poisoning, United States and Florida, 1999 – 2018. Source: [CDC WONDER](#).

CANNABIS

Fatal drug poisonings due to cannabis are even rarer in both the US and Florida (Figure 175). Note that the range of the y-axis in Figure 175 is the same as those previously shown for the purpose of comparison between substances.

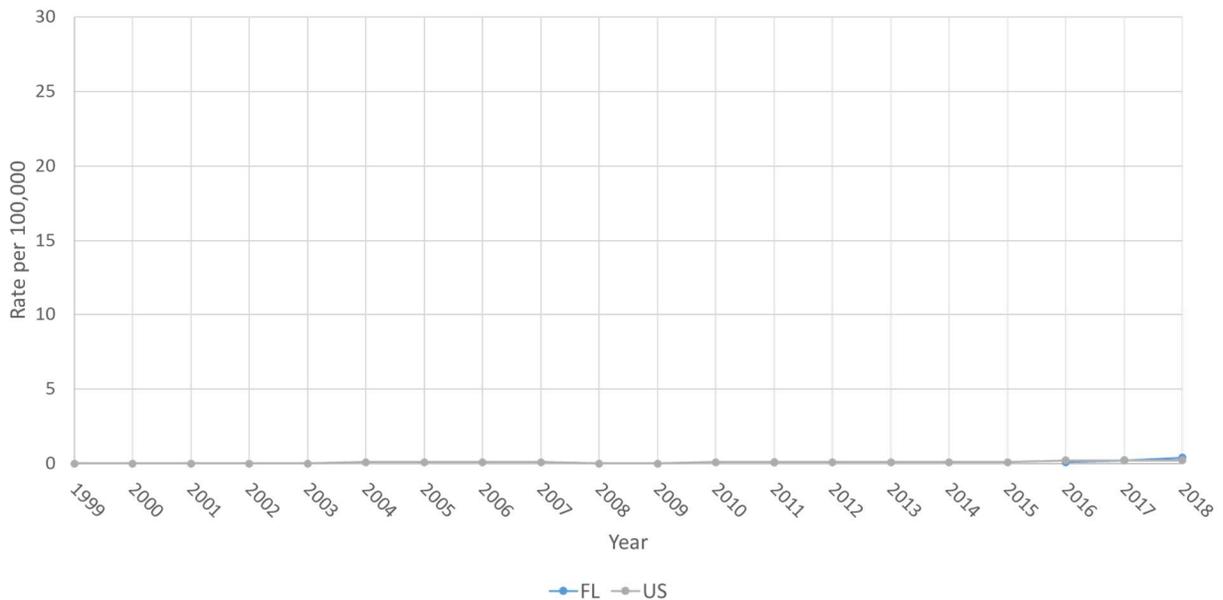


Figure 175. Age-Adjusted Mortality Rate, Cannabis, United States and Florida, 1999 – 2018. *Missing points indicate suppressed data. Source: [CDC WONDER](#).

Note the range of the y-axis in Figure 176 is much narrower to allow further examination of the trends observed for fatal cannabis poisoning. Though these deaths are rare, ranging from only double digits nationally in the early part of the 21st century to a mortality rate of 0.1 deaths per 100,000 population for all but two of the years 2004 through 2015, these rates nearly doubled in 2016 to 0.2 per 100,000 population in the US (Figure 176). Florida rates similarly doubled from 2016 to 2017 and again from 2017 to 2018, ending the period with a mortality rate of 0.4 deaths per 100,000 population.

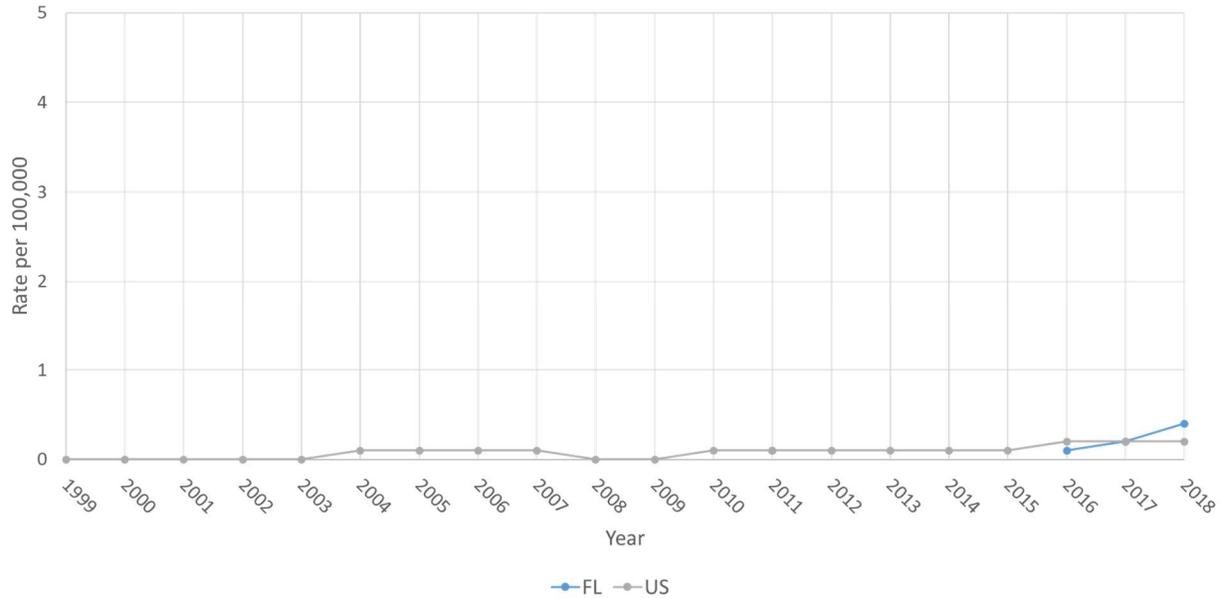


Figure 176. Age-Adjusted Mortality Rate, Cannabis, United States and Florida, 1999 – 2018. *Missing points indicate suppressed data. Source: [CDC WONDER](#).

KRATOM

Deaths in which kratom was detected have been steadily rising in Florida since this substance began being tracked by the Medical Examiners Commission (Figure 177) - rising from fewer than ten deaths to nearly a hundred deaths statewide in 2019.

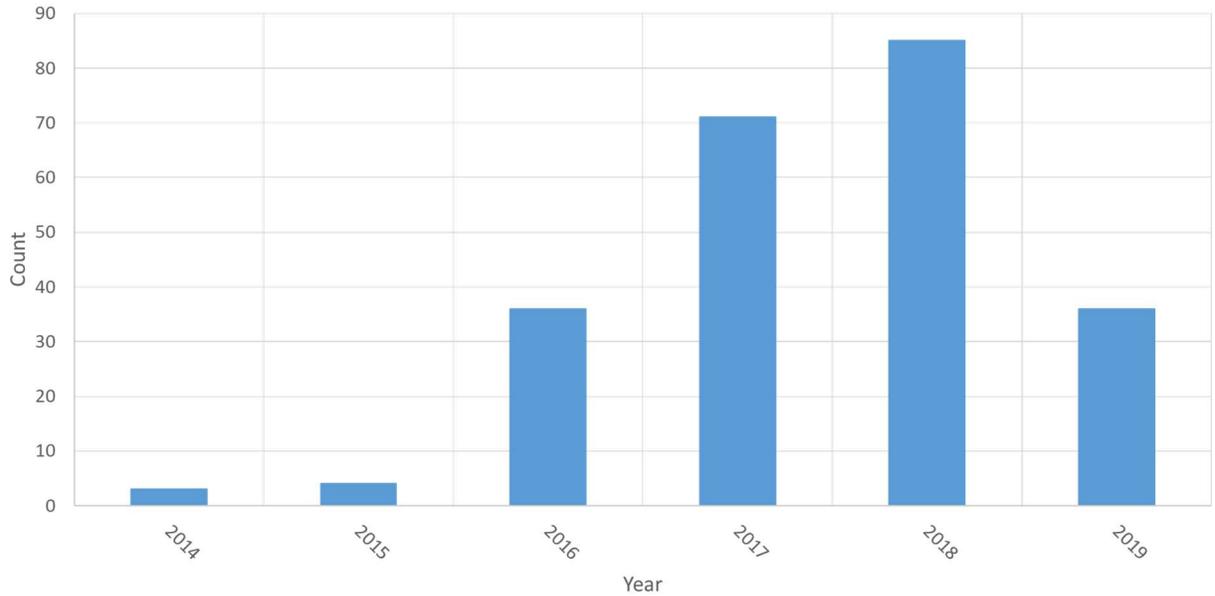


Figure 177. Kratom Detected Deaths, Florida, 2014 – 2019. *2019 data is for January – June 2019. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

When accounting for population, the frequency of deaths for which kratom was detected is comparable to the number of deaths caused by cannabis and alcohol (Figure 178).

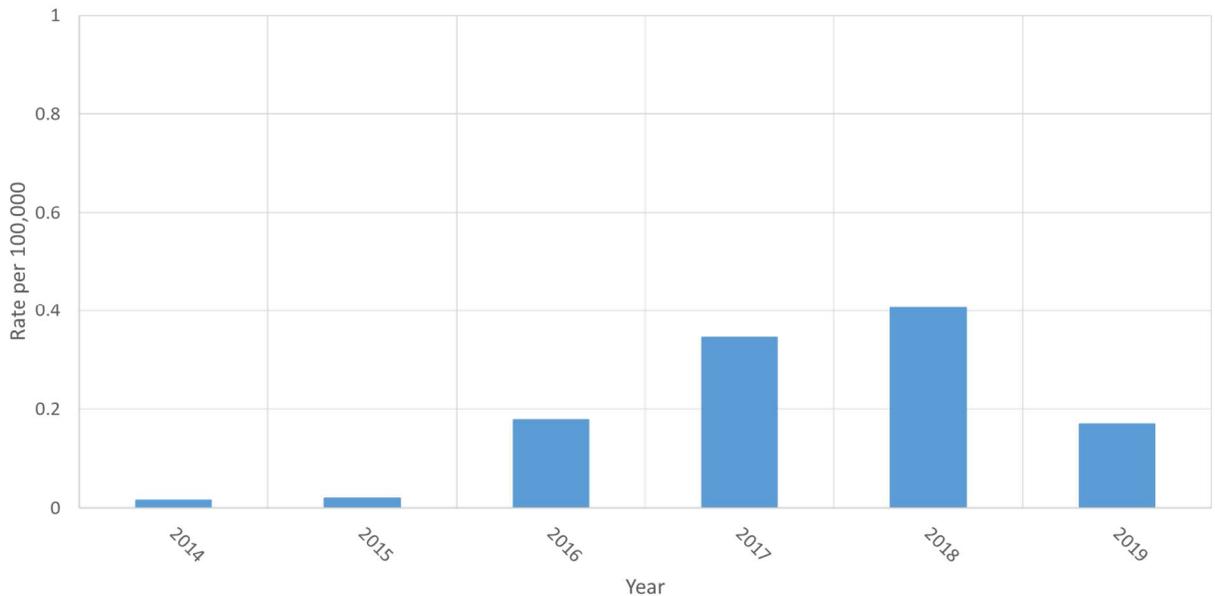


Figure 178. Kratom Detected Deaths, Florida, 2014 – 2019. *2019 data is for January – June 2019. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

Deaths in which kratom is detected commonly involve other drugs; the most common other drug is fentanyl (57.6%), followed by cocaine (38.8%) (Figure 179).

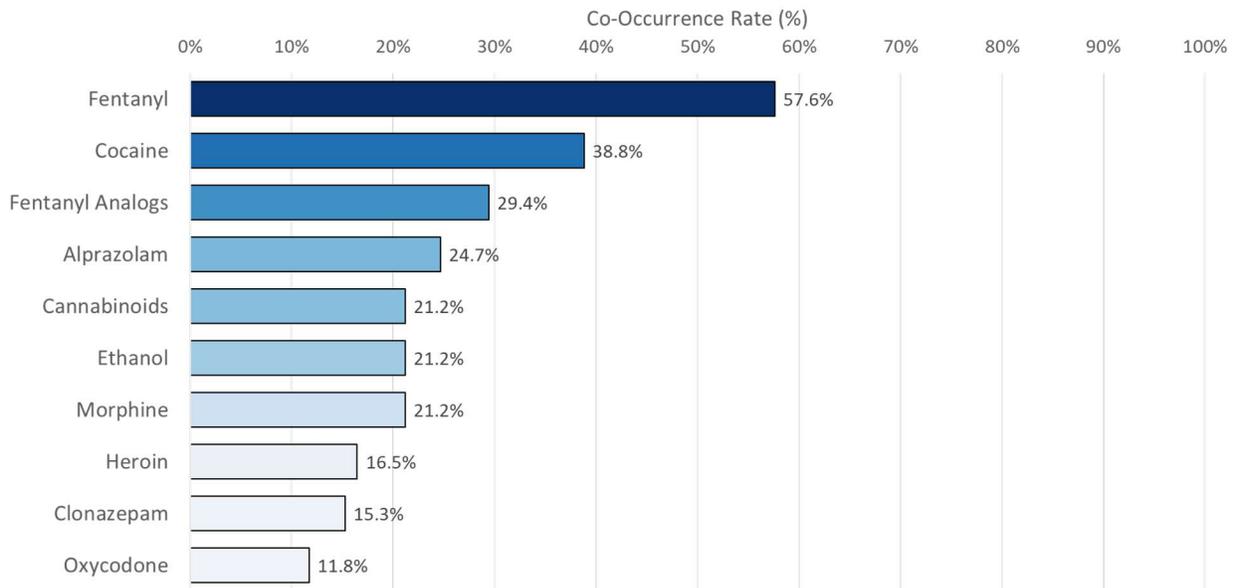


Figure 179. Top 10 Co-Occurring Substances among Kratom Detected Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

POLY-SUBSTANCE

The majority of poisoning deaths in Florida involve more than one substance, also known as polysubstance. The proportion of poisoning deaths that involve polysubstance has been steadily increasing over time, with over 60% of poisoning deaths occurring in Florida involving multiple substances in 2018 (Table 2).

Year	Any Drug Involved	Multiple Drugs Involved	% Multiple Drugs Involved
2003	6747	3233	47.9
2004	7113	3609	50.7
2005	7544	3826	50.7
2006	7729	4019	52.0
2007	8596	4571	53.2
2008	8536	4854	56.9
2009	8642	4996	57.8
2010	8957	5143	57.4
2011	8619	4774	55.4
2012	8329	4451	53.4
2013	8226	4263	51.8
2014	8583	4626	53.9
2015	9783	5617	57.4
2016	11908	7335	61.6
2017	12436	7861	63.2
2018	12075	7426	61.5

Table 2. Total Drug-involved Deaths and Polysubstance Deaths, Florida, 2003 – 2018.

Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

In particular, the combination of opioids and stimulants is common (Figures 180 – 184). For deaths caused by fentanyl or fentanyl analogs, the most commonly co-occurring substance (aside from opioid metabolites or other opioids) was cocaine, which was present in 46.4% of fentanyl-caused deaths (Figure 180).

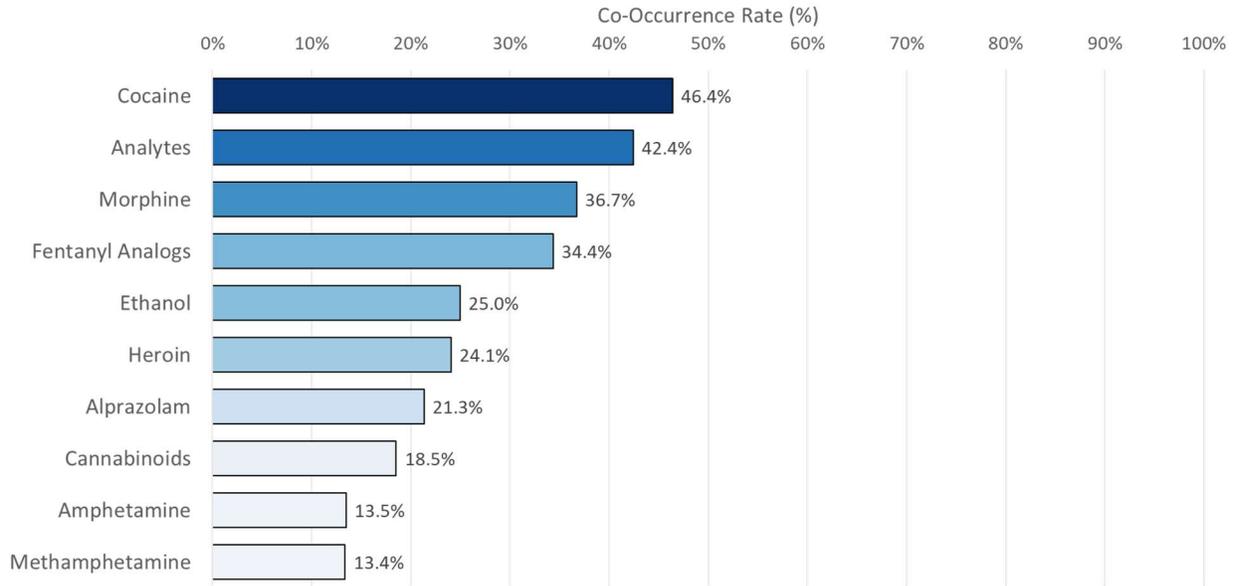


Figure 180. Top 10 Co-Occurring Substances among Fentanyl Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

The proportion of fentanyl analog-caused deaths occurring in Florida that involved cocaine was even higher at 48.9% in 2018 (Figure 180 and Figure 181). Other stimulants present included amphetamine and methamphetamine. The use of alcohol, benzodiazepines, and cannabis prior to death was also not uncommon.

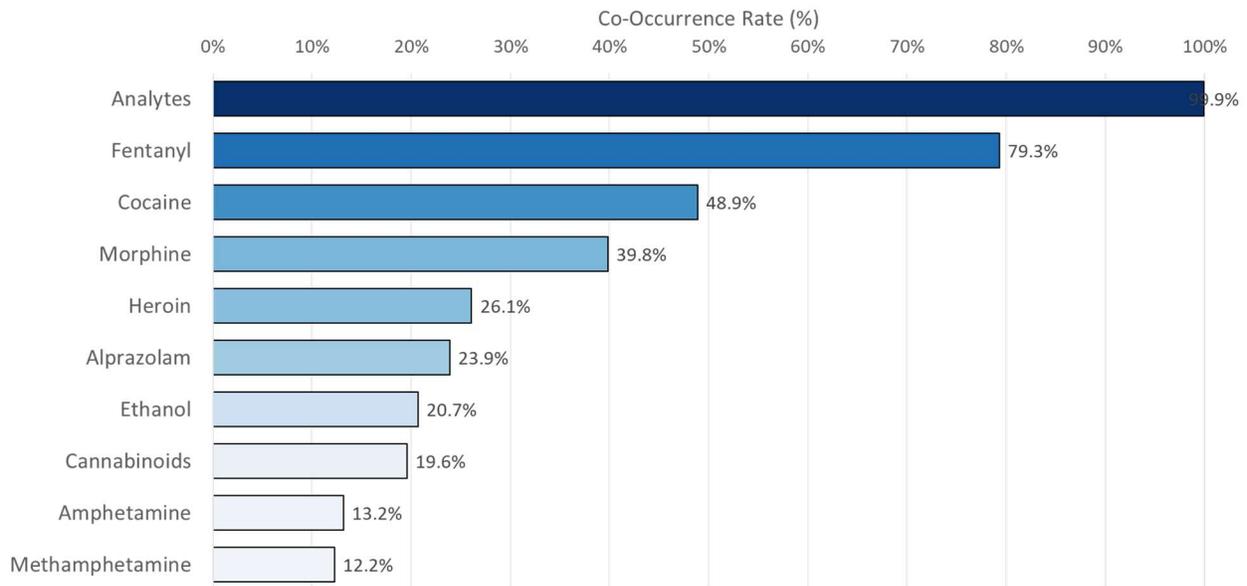


Figure 181. Top 10 Co-Occurring Substances among Fentanyl Analogs Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

A similar pattern is observed for heroin-caused deaths; aside from other opioids, cocaine was the most commonly co-occurring substance (43.4%). The use of alcohol, benzodiazepines, cannabis, and/or methamphetamine was also indicated in a significant number of heroin-caused deaths (Figure 182).

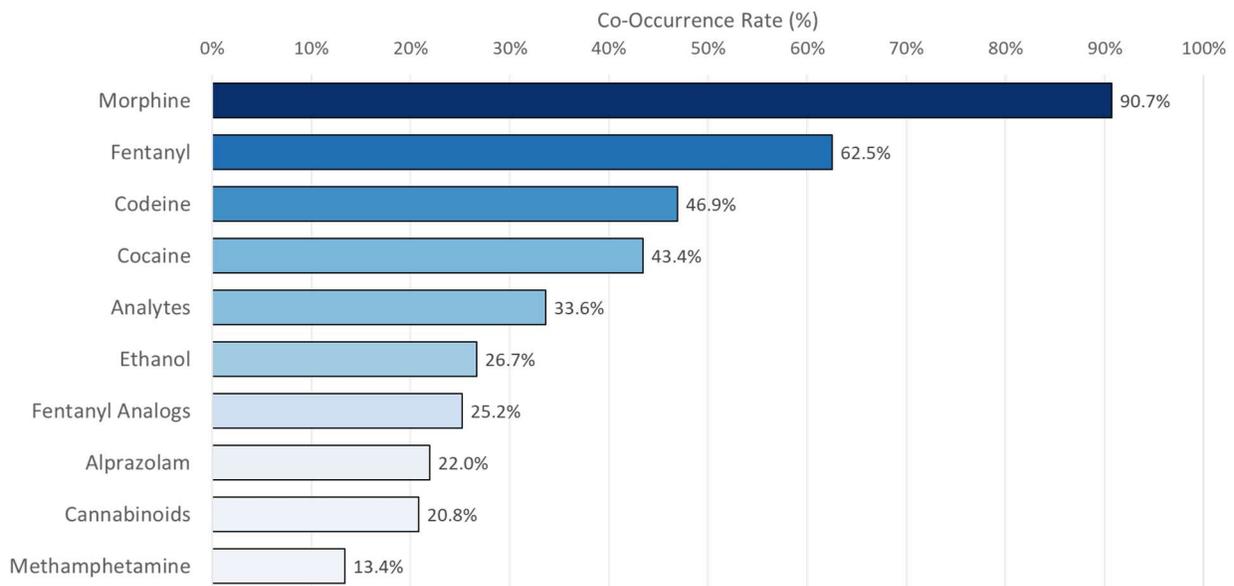


Figure 182. Top 10 Co-Occurring Substances among Heroin Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

Among stimulant-caused deaths, opioids were commonly co-occurring. Indeed, 54.0% of cocaine-caused deaths occurring in Florida in 2018 also involved fentanyl. Other opioids present in decedents whose

death was caused by cocaine included morphine (a metabolite of heroin), fentanyl analogs, heroin, and codeine (Figure 183).

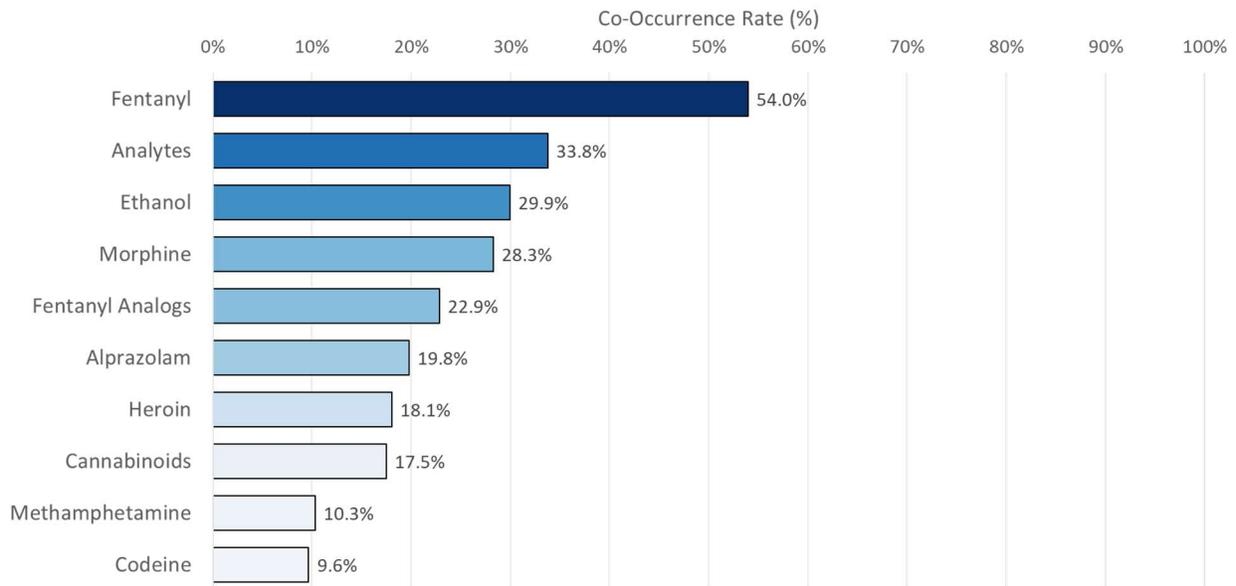


Figure 183. Top 10 Co-Occurring Substances among Cocaine Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

The same is observed for deaths caused by methamphetamine in Florida in 2018; nearly half (45.6%) of these deaths involved co-occurring fentanyl (Figure 184). Other opioids that were co-occurring in methamphetamine-caused deaths included morphine, fentanyl analogs, and heroin. A significant proportion of deaths also involved cannabis, ethanol, and benzodiazepines.

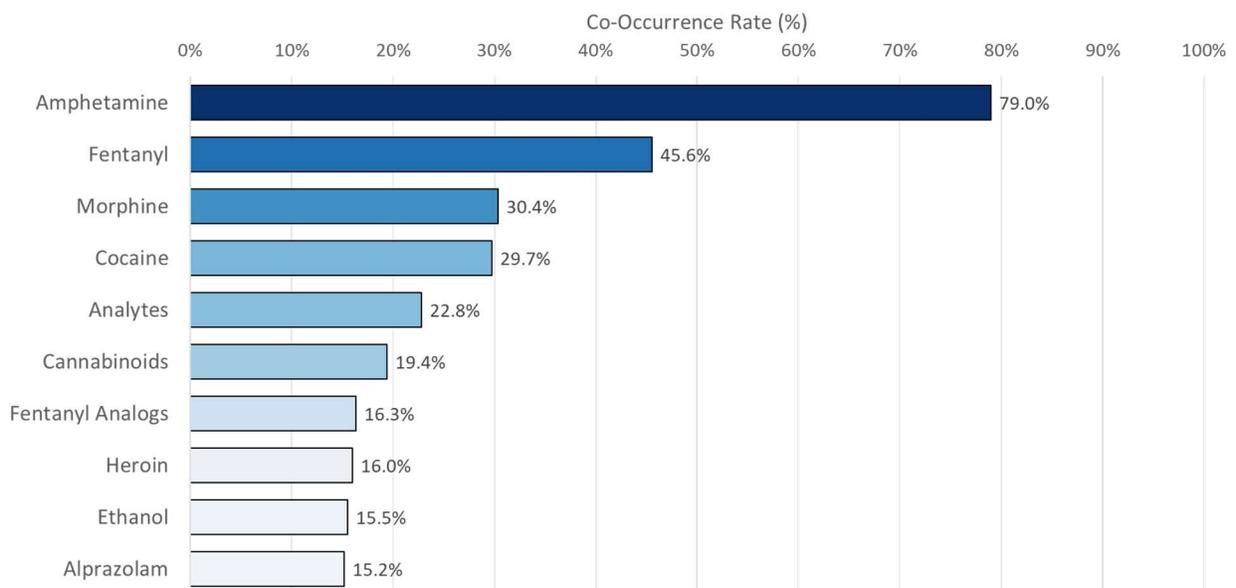


Figure 184. Top 10 Co-Occurring Substances among Methamphetamine Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

Among deaths caused by alcohol, both opioids and stimulants were commonly co-occurring, with 35.3% of alcohol-caused deaths involving fentanyl and 35.2% of these deaths involving cocaine (Figure 185).

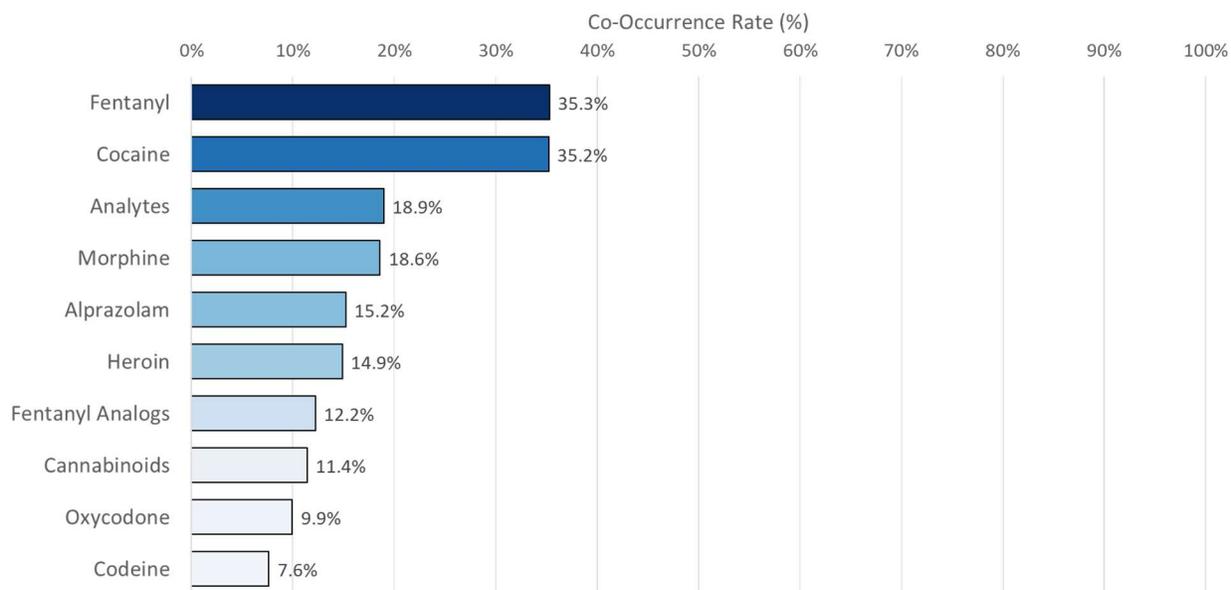


Figure 185. Top 10 Co-Occurring Substances among Ethanol Caused Deaths in Florida, 2018. Source: [FDLE MEC, Drugs in Deceased Persons Report](#).

CONCLUSIONS

ADULT SUBSTANCE USE

Generally, the trends for substance use among adult Floridians have been fairly flat over the entire period of observation (ranging from 2002 to 2018, depending on the data source). However, misuse of prescription opioids and use of heroin had been on a slow, but steady decline for most of the period, but small increases in use have occurred in the latest years for which data are available. Similar patterns in the use of psychostimulants have also been observed. Though rates of cocaine use were also on the decline, increases have been observed in the latest years (beginning in about 2014). Use of methamphetamine has also seen fairly marked increases, following marked declines, though the prevalence of methamphetamine use remains low at less than one per 100,000 population. The rate of past-year use of methamphetamine did decline in the latest period, 2017-2018. Marijuana is the one substance used by adults for which the pattern has been consistent over time: both past-month and -year use among adults has been steadily increasing over time throughout the period of observation; these increases have paralleled those observed for the nation as a whole. Rates of alcohol use have remained largely unchanged in Florida over the period, with the prevalence of alcohol use among adults remaining between 50 and 60%, and rates of binge drinking hovering just below 25%. These rates are similar to those for the US.

YOUTH SUBSTANCE USE

Generally, the prevalence of current substance use among Florida youth has been stable over time. However, lifetime use is declining 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, though the prevalence in Florida exceeds that for the US. The trend for use of heroin – regardless of time period of use – has been downward for Florida youth overall. However, increases in lifetime and past-month use were observed from 2018 – 2019. The data source from which past-year use is estimated are not yet available for 2019. Use of psychostimulants by Florida youth has been generally on a decline. Lifetime, past-year, and past-month use of cocaine has steadily declined among youth in Florida throughout the period of observation. The trend for use of methamphetamine has also been downward, with some increases observed in more recent years. 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. Lifetime, past-year, and past-month rates of alcohol use in the same period have been declining more quickly among Florida youth. Use of inhalants and hallucinogens in this group also declined over most of the period of observation, but the prevalence of both lifetime and past-month use began increasing in 2017 and 2018, respectively. Lifetime use of club drugs among Florida youth, however, declined throughout the entire period.

ARRESTS

Overall arrests have declined steadily over the period of observation, with a general pattern of the highest rates occurring in the panhandle of the state (in the MER served by Big Bend Community Based Care dba NWF Health), declining as you move south through the state, with the lowest rates in the southernmost part of the state (MERs served by Broward Behavioral Health Coalition and Southeast Florida Behavioral Health Network). The same trend over time and pattern among the MERs is observed specifically for drug arrests as well.

CITATIONS

Citations for driving under the influence of alcohol (DUI) have steadily declined by more than 25% in Florida as a whole over the period of observation. The same pattern of geographic variability observed for drug arrests is not observed for DUI citation. Most MERs have experienced a similar steady decline in rates of citation over the period of observation; Broward County is the exception with a marked increase in 2017.

MOTOR VEHICLE CRASHES

Following a considerable decline from 2012 to 2013, rates of motor vehicle crash (MVC) involving alcohol have continued to slowly, but steadily, decline in Florida. There is considerable variability in the rate of MVC involving alcohol by MER, with a rate in the MER served by Big Bend Community Based Care dba NWF Health about five times higher than the rate in the MER served by Broward Behavioral Health Coalition. The rate of injury and fatality resulting from MVC involving alcohol has slowly declined as well, with a marked amount of variability by MER. Rates tend to decline as you move south through the state.

The rate of motor vehicle crash (MVC) involving drugs other than alcohol is lower than that for alcohol-involved MVC, but the incidence of these crashes is increasing. Differences in the MER-specific rates are

similar to the alcohol-involved crashes, with the highest rates observed in the northern part of the state and the lowest in south Florida. The rates of injury and fatality resulting from these crashes is also increasing over time.

Occurring less frequently than alcohol- and drug-involved crashes, motor vehicle crashes involving both alcohol and drugs have been fairly stable over time. Differences in the MER-specific rates follow a different pattern, with the highest rates in north central Florida (although the lowest rates are still in the southernmost part of the state, similar to the other types of MVC). As with drug-involved motor vehicle crashes, injuries, and fatalities, rates of drug and alcohol-involved crash, injury, and fatality are similar in magnitude, unlike rates of alcohol-involved MVC and related injury. Rates for alcohol and drug-involved MVC injury and fatality remained steady over time, with a similar pattern in variability by MER for crashes.

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 both Florida and the nation as a whole. Increases over the period of observation were much slower in Florida compared to the US, resulting in a rate of ED visit for non-fatal poisoning in the nation about three times the rate in Florida. The majority of these poisonings are drug poisonings.

Though the rate of hospitalization for non-fatal poisoning was higher in Florida in the very beginning of the period of observation, increases experienced in the nation as a whole drove the US rate higher than the rate for Florida. The rate of hospitalization in Florida has been fairly stable over time, with a two-year decrease from 2016 to 2017 and 2017 to 2018, following increases from 2014 to 2015 and 2015 to 2016. The rate of hospitalization for non-fatal poisoning in Florida has been below the rate for the US as a whole since 2011.

FATAL POISONINGS

While fatal drug poisonings declined in 2018 for the first time since 2013 in Florida (and at least 1999 nationally), an increase in deaths due to psychostimulants was observed. In addition, though death due heroin declined from 2017 to 2018, death due to natural or semi-synthetic opioids remained the same in 2018 as 2017, and death due to synthetic opioids continued to rise. Polysubstance continues to be involved in an increasing number of drug poisoning deaths, particularly related to opioids and stimulants. And, based on preliminary numbers nationally, the decline in fatal overdose may have been short-lived.

DATA SOURCES

Bureau of Economic and Business Research. Population Studies Program. [Florida Estimates of Population](#). (2000 – 2019)

Centers for Disease Control and Prevention (CDC). [Behavioral Risk Factor Surveillance System \(BRFSS\)](#). (2006 – 2018)

Centers for Disease Control and Prevention (CDC). (2007 – 2018). [Web-based Injury Statistics Query and Reporting System \(WISQARS\)](#).

Centers for Disease Control and Prevention (CDC). (1999 – 2018). [Wide Ranging Online Data for Epidemiologic Research \(WONDER\)](#).

Centers for Disease Control and Prevention (CDC). [Youth Risk Behavior Surveillance System \(YRBSS\)](#). (2001 – 2017)

[Florida Agency for Health Care Administration \(AHCA\)](#). (2007 – 2018)

Florida Department of Children and Families (DCF). [Florida Youth Substance Abuse Survey \(FYSAS\)](#). (2000 – 2019)

[Florida Department of Highway Safety and Motor Vehicles \(FLHSMV\)](#). (2000 – 2017)

Florida Department of Law Enforcement (FDLE). [Annual Uniform Crime Reports](#). (2000 – 2019)

Florida Department of Law Enforcement (FDLE). [Drugs Identified in Deceased Persons by Florida Medical Examiners Commission \(MEC\)](#). (2003 – 2018)

National Institute on Drug Abuse (NIDA). [Monitoring the Future \(MTF\)](#). (2006 – 2019)

Substance Abuse and Mental Health Services Administration (SAMHSA). (2002 – 2018). [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
- 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