Patterns of and Trends in Substance Use in Florida: An Update

Presented by:
Ben Hackworth, MPH
FADAA Epidemiologist Consultant
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Objectives

• Identify updates in substance use trends for Florida youth and adults
• Understand patterns of substance use regionally and statewide
• Characterize the decline in overall substance-related mortality in Florida
Introduction

- Update to the 2019 Annual Report, *Patterns and Trends of Substance Use Within and Across the Regions of Florida*.

- Update Florida Youth Substance Abuse Survey data. In addition, any state-specific data that become available from national surveillance efforts will also be included.
Data Sources

- Based on data released following the preparation of the annual report
  - National Survey on Drug Use and Health (NSDUH), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA)
  - Behavioral Risk Factor Surveillance System (BRFSS), sponsored by the Centers for Disease Control and Prevention (CDC)
  - Florida Youth Substance Abuse Survey (FYSAS), obtained by the Department of Children and Families (DCF)
  - *Drugs Identified in Deceased Persons by Florida Medical Examiners: 2019 Annual Report*, prepared by the Florida Medical Examiners Commission
  - *Florida Estimates of Population, 2019*, published by the Bureau of Economic and Business Research at the University of Florida
Florida by Geographic Region, Managing Entity, County

- **Big Bend Community Based Care**
  - 7%, (1,538,501)

- **Lutheran Services Florida**
  - 18%, (3,905,648)

- **Central Florida Cares Health System**
  - 13%, (2,885,713)

- **Central Florida Behavioral Health Network**
  - 28%, (6,107,628)

- **Southeast Florida Behavioral Health Network**
  - 10%, (2,151,006)

- **Broward Behavioral Health Coalition**
  - 9%, (1,932,212)

- **South Florida Behavioral Health Network**
  - 13%, (2,910,617)
Alcohol

Underage drinking

- Nationally, the general trend in the decline of alcohol use over time among 12 – 17-year-olds continues.
- Slight increase in alcohol use among adolescents in Florida as well as that of the nation in 2017.
- After 2017, adolescents in Florida decreased alcohol use and that of the nation.
Past 30-day Alcohol Use among adults in Florida and U.S.

Source: NSDUH
Past 30-day Alcohol Use among U.S. and Florida Youth 12-17, 2006-2019

Source: FYSAS & NSDUH
Lifetime and 30-day Alcohol Use among Florida Youth

Source: Florida Youth Substance Abuse Survey, 2020
Lifetime and Past 30-day Alcohol Use among Male and Female Florida Youth, 2010-2020

Source: FYSAS
Alcohol

Binge drinking

• Patterns observed for current drinking also observed for binge drinking.

• Prevalence continues to decline over time for youth.
Binge Drinking among adults in Florida and U.S.

Source: BRFSS
Binge Drinking among Florida Youth, 2008-2020

Source: FYSAS
Binge Drinking among Florida Managing Entities, 2020

<table>
<thead>
<tr>
<th>Source</th>
<th>Prevalence %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBCBC</td>
<td>6.5</td>
</tr>
<tr>
<td>CFCHS</td>
<td>5.6</td>
</tr>
<tr>
<td>CFBHN</td>
<td>6.3</td>
</tr>
<tr>
<td>LFS</td>
<td>7.7</td>
</tr>
<tr>
<td>SFBHN</td>
<td>7.7</td>
</tr>
<tr>
<td>SEFBHN</td>
<td>6.9</td>
</tr>
<tr>
<td>Florida</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Source: FYSAS, 2020
Vaping

- Adolescent use is on the rise.
- Change in FYSAS questionnaire leads to limited trend data.
Lifetime and Past 30-day Vaping Nicotine Use by ME, 2020

Source: FYSAS
Lifetime and Past 30-day Vaping Marijuana Use by ME, 2020

Source: FYSAS
Marijuana

• Nationally, new data suggest that the prevalence of marijuana use among both adolescents and adults continues to rise.
• Florida saw a slight decrease among youth.
Past 30-day and Lifetime Marijuana Use among Florida Youth, 2010-2020

Source: FYSAS
Cocaine

• Nationally, cocaine use among those 12+ saw an increase in prevalence higher than 2% in 2017. A decrease in prevalence occurred in 2018.

• Florida saw a slight increase among those 12+ in 2018.

• Past year use among youth in Florida and the U.S., cocaine use had a decreasing trend since 2006.

• Lifetime and past month use among Florida youth has decreased with very low prevalence rates for past month use.
Cocaine use among adults (12+), Florida and U.S.

Source: NSDUH
Past Year Cocaine Use among 12–17-year-olds, Florida and U.S.

Source: NSDUH
Lifetime and Past 30-day Use of Cocaine among Florida Youth, 2010-2020

Source: FYSAS
Methamphetamine

- Florida youth saw a slight increase for lifetime use while past month use stayed the same with the most recent data.
Lifetime and Past 30-day Use of Methamphetamine among Florida Youth, 2010-2020
Inhalants

• Florida youth has seen an increase in inhalant use since 2016 for lifetime and past month use.
Lifetime and Past 30-day Use of Inhalants among Florida youth, 2010-2020

Source: FYSAS
Club Drugs

• Club drug use among Florida youth has decreased since 2010 but saw a slight increase in lifetime and past month use from 2018 to 2020.
Lifetime and Past 30-day Use of Club Drugs among Florida Youth, 2010-2020

Source: FYSAS
Prescription Drug Misuse

• Prescription drug misuse among Florida youth has decreased since 2010 with lifetime use at 7.4% to 3.1% in 2020.
Lifetime and Past 30-day Use of Prescription Drugs among Florida Youth, 2010-2020

![Graph showing the prevalence of prescription drug use among Florida youth from 2008 to 2022. The graph indicates a decrease in both lifetime and past 30-day use over time. The highest prevalence was in 2008, with approximately 7.4% for lifetime and 2.9% for past 30 days. By 2020, these percentages had decreased to 3.1% lifetime and 1.1% past 30 days. Source: FYSAS]
Florida Medical Examiner Death Data

- Fentanyl and fentanyl analogue-related deaths saw the biggest increase in number of deaths from 2015 to 2016.
- The second biggest increase in the number of deaths with the most recent data from 2018 to 2019.
Fentanyl and Fentanyl Analogue-Related Deaths in Florida, 2007-2019

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Number of occurrences and percent change of Fentanyl and Fentanyl analogues among decedents, Florida and by managing entity region, 2018 -2019

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>2,703</td>
<td>1,052</td>
<td>3,755</td>
<td>3,655</td>
<td>1,418</td>
<td>5,073</td>
<td>35.1%</td>
</tr>
<tr>
<td>BBCBC</td>
<td>86</td>
<td>26</td>
<td>112</td>
<td>152</td>
<td>28</td>
<td>180</td>
<td>60.7%</td>
</tr>
<tr>
<td>BBHC</td>
<td>287</td>
<td>110</td>
<td>397</td>
<td>378</td>
<td>124</td>
<td>502</td>
<td>25.4%</td>
</tr>
<tr>
<td>CFBHN</td>
<td>662</td>
<td>231</td>
<td>893</td>
<td>942</td>
<td>242</td>
<td>1,184</td>
<td>32.6%</td>
</tr>
<tr>
<td>CFCHS</td>
<td>546</td>
<td>174</td>
<td>720</td>
<td>636</td>
<td>206</td>
<td>842</td>
<td>16.9%</td>
</tr>
<tr>
<td>LFS</td>
<td>538</td>
<td>190</td>
<td>728</td>
<td>746</td>
<td>281</td>
<td>1,027</td>
<td>41.1%</td>
</tr>
<tr>
<td>SFBHN</td>
<td>169</td>
<td>129</td>
<td>298</td>
<td>268</td>
<td>158</td>
<td>426</td>
<td>42.9%</td>
</tr>
<tr>
<td>SEFBHN</td>
<td>415</td>
<td>192</td>
<td>607</td>
<td>533</td>
<td>379</td>
<td>912</td>
<td>50.2%</td>
</tr>
</tbody>
</table>

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Florida Medical Examiner Death Data

• Similar to fentanyl-related deaths, heroin saw the biggest increase in the number of deaths from 2015-2016.
Heroin-related deaths in Florida, 2001-2019

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Number of occurrences and percent change of Heroin among decedents, Florida and by managing entity region, 2018 -2019

<table>
<thead>
<tr>
<th>Managing Entity</th>
<th>Heroin-related deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Florida</td>
<td>940</td>
</tr>
<tr>
<td>BBCBC</td>
<td>43</td>
</tr>
<tr>
<td>BBHC</td>
<td>110</td>
</tr>
<tr>
<td>CFBHN</td>
<td>244</td>
</tr>
<tr>
<td>CFCHS</td>
<td>120</td>
</tr>
<tr>
<td>LFS</td>
<td>186</td>
</tr>
<tr>
<td>SFBHN</td>
<td>59</td>
</tr>
<tr>
<td>SEFBHN</td>
<td>178</td>
</tr>
</tbody>
</table>

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Florida Medical Examiner Death Data

- Cocaine-related deaths in Florida saw similar trends to fentanyl and heroin with the highest increase in deaths from 2015-2016.
Number of Cocaine Deaths in Florida, 2003-2019

Data Source: 2018-2019 Florida Medical Examiner Commission Report
<table>
<thead>
<tr>
<th>Managing Entity</th>
<th>Cocaine-related deaths</th>
<th>2018</th>
<th>2019</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td></td>
<td>2,856</td>
<td>2,962</td>
<td>3.7%</td>
</tr>
<tr>
<td>BBCBC</td>
<td></td>
<td>102</td>
<td>123</td>
<td>20.6%</td>
</tr>
<tr>
<td>BBHC</td>
<td></td>
<td>236</td>
<td>277</td>
<td>17.4%</td>
</tr>
<tr>
<td>CFBHN</td>
<td></td>
<td>729</td>
<td>728</td>
<td>-0.1%</td>
</tr>
<tr>
<td>CFCHS</td>
<td></td>
<td>491</td>
<td>483</td>
<td>-1.6%</td>
</tr>
<tr>
<td>LFS</td>
<td></td>
<td>517</td>
<td>509</td>
<td>-1.5%</td>
</tr>
<tr>
<td>SFBHN</td>
<td></td>
<td>374</td>
<td>433</td>
<td>15.8%</td>
</tr>
<tr>
<td>SEFBHN</td>
<td></td>
<td>407</td>
<td>409</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Data Source: 2018-2019 *Florida Medical Examiner Commission Report*
Florida Medical Examiner Death Data

- Methamphetamine-related deaths has increased since 2015 and has no end in sight of slowing down.
Methamphetamine-Related deaths in Florida, 2004-2019

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Number of occurrences and percent change of Methamphetamine-related deaths among decedents, Florida and by managing entity region, 2018-2019

<table>
<thead>
<tr>
<th>Managing Entity</th>
<th>Methamphetamine-related deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Florida</td>
<td>1,056</td>
</tr>
<tr>
<td>BBCBC</td>
<td>153</td>
</tr>
<tr>
<td>BBHC</td>
<td>18</td>
</tr>
<tr>
<td>CFBHN</td>
<td>357</td>
</tr>
<tr>
<td>CFCHS</td>
<td>158</td>
</tr>
<tr>
<td>LFS</td>
<td>295</td>
</tr>
<tr>
<td>SFBHN</td>
<td>33</td>
</tr>
<tr>
<td>SEFBHN</td>
<td>42</td>
</tr>
</tbody>
</table>

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Kratom

- Number of deaths in which kratom were involved decreased.
- Not known if deaths are from kratom alone or polysubstance use involved.
Kratom occurrences among decedents, 2018 vs. 2019

Source: FDLE MEC, Drugs in Deceased Persons Report
Benzodiazepines

• Number of deaths in which benzodiazepines were involved decreased.

• Smaller percentage of deaths involving benzodiazepines were ruled to be caused by these drugs.
Benzodiazepines

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Benzodiazepines

Fewer deaths occurring in 2019 in Florida involved prescription benzodiazepines compared to 2018. Declines were not observed uniformly across regions.
Number of occurrences and percent change of alprazolam and diazepam in decedents, Florida and by managing entity region, 2018 -2019

| ME Region  | Alprazolam | Diazepam |  |  |  |  |
|------------|------------|----------|----------|----------|----------|
|             | 2018       | 2019     | % change | 2018     | 2019     | % change |
| Florida     | 1,654      | 1,523    | -7.92%   | 541      | 428      | -20.89%  |
| BBCBC       | 105        | 92       | -12.38%  | 30       | 23       | -23.33%  |
| BBHC        | 116        | 140      | 20.69%   | 31       | 24       | -22.58%  |
| CFBHN       | 483        | 451      | -6.63%   | 158      | 153      | -3.16%   |
| CFCHS       | 220        | 149      | -32.27%  | 82       | 44       | -46.34%  |
| LFS         | 272        | 255      | -6.25%   | 118      | 80       | -32.20%  |
| SFBHN       | 178        | 196      | 10.11%   | 55       | 51       | -7.27%   |
| SEFBHN      | 280        | 240      | -14.29%  | 167      | 53       | -20.90%  |

Data Source: 2018-2019 Florida Medical Examiner Commission Report
Recap

• **Alcohol.** Decline in use and binge drinking among youth

• **Marijuana.** Not only is marijuana use among both youth and adults increasing. Based on previous years’ data, the trends in Florida are preceding the national trends.

• **Vaping:** New detailed data from FYSAS is available for vaping nicotine and vaping marijuana
Recap

- **Opioids.** Number of deaths involving most specific opioids declined in 2018 compared to 2019, with the most notable exception being fentanyl.

- **Stimulants.** Though deaths due to both cocaine and methamphetamine have increased in number for the four previous years, the number of deaths involving cocaine in 2018 decreased from 2017. Number of deaths involving methamphetamine continues to rise, however.

- **Benzodiazepines.** The number of deaths involving benzodiazepines and the proportion of deaths attributed to benzodiazepines is declining in Florida.
Questions?

Contact:
Benjamin Hackworth, MPH
bthackworth@gmail.com