PATTERNS OF AND TRENDS IN SUBSTANCE USE IN FLORIDA:
ANNUAL UPDATE REPORT

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OBJECTIVES

• Identify the four waves of the opioid epidemic
• Understand patterns of substance use regionally and statewide
• Understand morbidity and mortality trends in Florida
• Understand prevention strategies for substance use
INTRODUCTION

- Update to the 2021 Annual Report, *Patterns and Trends of Substance Use Within and Across the Regions of Florida*
- Discuss the Four Waves of the Opioid Epidemic and its relation to national and state-specific data
DATA SOURCES

- Based on data released following the preparation of the 2021 Annual Report
  - Center for Disease Control and Prevention (CDC)
  - Florida Health Charts, sponsored by the Florida Department of Health
  - *Drugs Identified in Deceased Persons by Florida Medical Examiners: 2020 Interim Report*, prepared by the Florida Medical Examiners Commission
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**
- Behavioral Health Network: 28%, (6,107,628)
- Cares Health System: 13%, (2,885,713)

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

**South Florida**
- Behavioral Health Network: 13%, (2,910,617)
- Broward Behavioral Health Coalition: 9%, (1,932,212)

**Northeast**
- Suncoast
- Southern
- Southeast
- Central
- Northwest

Managing Entities:
- Big Bend Community Based Care
- Lutheran Services Florida
- Southeast Florida Behavioral Health Network
- Central Florida Cares Health System
- Broward Behavioral Health Coalition
- Central Florida Behavioral Health Network
OVERDOSE WAVES

*Stimulants defined as cocaine and psychostimulants with abuse potential (mainly methamphetamine). Source: CDC WONDER
1ST WAVE: PRESCRIPTION OPIOIDS

• Used to treat moderate-to-severe pain and are often prescribed after surgery or injury

• Prescription opioids became a problem when prescribing rates skyrocketed among health care providers

• Most common prescription opioid overdose deaths include:
  • Methadone
  • Oxycodone
  • Hydrocodone

Source: CDC
CONTROLLED SUBSTANCE PRESCRIBING RATE, 2020

Source: FROST
PRESCRIPTION DRUG DEATHS - OPIATES FROM THE MEDICAL EXAMINERS INTERIM REPORT, JANUARY – JUNE 2020

<table>
<thead>
<tr>
<th>Health System</th>
<th>Methadone</th>
<th>Hydrocodone</th>
<th>Oxycodone</th>
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<tbody>
<tr>
<td>Big Bend Community Based Care</td>
<td>13</td>
<td>32</td>
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<td>Lutheran Services Florida</td>
<td>41</td>
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<td>Central Florida Behavioral Health Network</td>
<td>72</td>
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<td>Central Florida Cares Health System</td>
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<td>Southeast Florida Behavioral Health Network</td>
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<td>61</td>
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<tr>
<td>Broward Behavioral Health Coalition</td>
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<td>36</td>
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</tbody>
</table>

Source: FDLE
PRESCRIPTION OPIOID PREVENTION

- Academic Detailing
  - Guidelines for prescribing opioids for chronic pain
  - Education on addiction and risks for addiction

- Prescription Drug Campaigns
  - Drug Take Back

- Prescribing Policy Change
  - Pill Mill Strike Force, 2011
  - Florida PDMP established, 2012
  - Prescribing limits, continuing education, and expanding required use of PDMP, 2018
2\textsuperscript{ND} WAVE: HEROIN

- In 2010, increases in overdose deaths involved heroin.
- In the US, nearly 130,000 people died from overdoses related to heroin from 1999-2019.
- In 2019, heroin-involved death rates decreased over 6% from 2018-2019 in the US.
- In 2019, heroin-involved death rates remained stable in Florida.

Source: CDC
HEROIN-RELATED DEATHS IN FLORIDA, 2001 – 2020

Source: FDLE
Reference: * = January - June
HEROIN-RELATED DEATHS IN FLORIDA, JANUARY – JUNE 2020

- 84.1% of deaths with heroin involved a combination with other drugs
- 84.1% of deaths with heroin were the cause of death
- Age of Decedent: 35-50 had the highest deaths = 196

Source: FDLE
HEROIN-RELATED DEATHS BY MANAGING ENTITY, JANUARY – JUNE 2020

Source: FDLE
CO-OCCURRING SUBSTANCE AMONG HEROIN- CAUSED DEATHS IN 2020

Source: FROST
HEROIN SECONDARY/TERTIARY PREVENTION

• Medication Assisted Treatment

• Syringe Service Programs

• Expand access to and use of naloxone
  • Pharmacies, community-based organizations, first responders, treatment centers, and criminal justice facilities
  • Good Samaritan Laws

Source: CDC
3rd Wave: Synthetic Opioids (Fentanyl)

• Synthetic opioids (fentanyl) began to increase in overdose deaths in 2013.
• The landscape for illicit manufactured fentanyl continues to change with analogs, combination with other substances, and counterfeit pills.
• Synthetic opioids, including fentanyl, are now the most common drugs involved in drug overdose deaths in the US.

Source: CDC
FENTANYL AND FENTANYL ANALOG-RELATED DEATHS IN FLORIDA, 2007-2020*

Source: FDLE
Reference: * = January - June
FENTANYL AND FENTANYL ANALOG-RELATED DEATHS IN FLORIDA, JANUARY – JUNE 2020

• 93.4% of deaths with fentanyl involved a combination with other drugs
• 92.4% of deaths with fentanyl were the cause of death
• 99.8% of deaths with fentanyl analogues involved a combination with other drugs
• 47% of deaths with fentanyl analogues were the cause of death
• Age of Decedent (Fentanyl): 35-50 had the highest deaths = 1,096
• Age of Decedent (Fentanyl Analogues): 35-50 had the highest deaths = 336

Source: FDLE
FENTANYL AND FENTANYL ANALOG-RELATED DEATHS BY MANAGING ENTITY, JANUARY – JUNE 2020

- Big Bend Community Based Care: 123
- Lutheran Services Florida: 725
- Central Florida Behavioral Health Network: 983
- Central Cares Health System: 536
- Southeast Florida Behavioral Health Network: 636
- South Florida Behavioral Health Network: 259
- Broward Behavioral Health Coalition: 481

Source: FDLE
CO-OCCURRING SUBSTANCE AMONG FENTANYL-CAUSED DEATHS IN 2020

Source: FROST
CO-OCCURRING SUBSTANCE AMONG FENTANYL ANALOGS-CAUSED DEATHS IN 2020

Source: FROST
FENTANYL PREVENTION

• Surveillance for opioid overdoses to track changing illicit opioid market
• Forensic toxicology testing
• Fentanyl strips

Source: CDC
4th Wave: Polysubstance

- Psychostimulants mixed with opioids
  - Cocaine
  - Methamphetamine
COCAINE-RELATED DEATHS IN FLORIDA, 2001-2020*

<table>
<thead>
<tr>
<th>Year</th>
<th># of Occurrences</th>
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<tbody>
<tr>
<td>2001</td>
<td>1,105</td>
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<tr>
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<td>2003</td>
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<td>1,834</td>
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<td>2013</td>
<td>2,882</td>
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<td>2014</td>
<td>3,129</td>
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<td>2015</td>
<td>2,856</td>
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<tr>
<td>2016</td>
<td>2,962</td>
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<td>2017</td>
<td>3,702</td>
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Source: FDLE

Reference: * = January - June
COCAINE-RELATED DEATHS IN FLORIDA, JANUARY – JUNE 2020

- 90.5% of deaths with cocaine involved a combination with other drugs
- 66.4% of deaths with cocaine were the cause of death
- Age of Decedent: 35-50 had the highest deaths = 700

Source: FDLE
COCAINE-RELATED DEATHS BY MANAGING ENTITY, JANUARY – JUNE 2020

Source: FDLE
CO-OCCURRING SUBSTANCES AMONG COCAINE-CAUSED DEATHS IN 2020

Top 10 Co-occurring Substances among Cocaine-Caused Deaths in 2020

- Fentanyl: 75.4%
- Ethanol: 31.4%
- Fentanyl Analogs: 27.5%
- Cannabinoids: 19.9%
- Morphine: 18.6%
- Alprazolam: 17.3%
- Heroin: 13.7%
- Methamphetamine: 11.9%
- Amphetamine: 11.5%
- Oxycodone: 8.3%

Source: FROST
METHAMPHETAMINE-RELATED DEATHS IN FLORIDA, 2014 – 2020*

* First Half data for 2020 is doubled to estimate full year occurrences

Source: FDLE

Reference: * = January - June
METHAMPHETAMINE DEATHS IN FLORIDA, JANUARY – JUNE 2020

• **98%** of deaths with methamphetamine involved a combination with other drugs

• **46%** of deaths with methamphetamine were the cause of death

• Age of Decedent: **35-50** had the highest deaths = **427**

Source: FDLE
METHAMPHETAMINE-RELATED DEATHS BY MANAGING ENTITY, JANUARY – JUNE 2020

Source: FDLE
CO-OCCURRING SUBSTANCES AMONG METHAMPHETAMINE-CAUSED DEATHS IN 2020

Source: FROST
POLYSUBSTANCE USE PREVENTION

- Evidence Based Practices
  - Motivational Interviewing
  - Contingency Management
  - Community Reinforcement Approach
  - Cognitive Behavioral Therapy
DRUG OVERDOSES RISE BEFORE AND AFTER COVID-19 PANDEMIC

Source: CDC
AGE-ADJUSTED DRUG OVERDOSE DEATH RATE, US & FLORIDA

Source: CDC
OPIOID MORTALITY RATE, FLORIDA

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate per 100,000</th>
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<tbody>
<tr>
<td>2015</td>
<td>13.1</td>
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<td>2016</td>
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<td>2017</td>
<td>21.9</td>
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<tr>
<td>2018</td>
<td>18.7</td>
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<td>2019</td>
<td>21.4</td>
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Source: Florida Health Charts
DRUG OVERDOSE DEATHS, FLORIDA


# of Drug Overdose Deaths in Florida:
- 2014: 3,241
- 2015: 4,884
- 2016: 5,617
- 2017: 5,977
- 2018: 4,977
- 2019: 5,577
- 2020: 3,708
- 2021: (data not available)

Source: Florida Health Charts
OPIOID OVERDOSE DEATHS, FLORIDA

Source: Florida Health Charts
RECAP

• 1\textsuperscript{st} Wave of the Opioid Epidemic. Overprescribing of opioids led a nation to misuse and addiction

• 2\textsuperscript{nd} Wave of the Opioid Epidemic. Heroin became the replacement for prescription opioids

• 3\textsuperscript{rd} Wave of the Opioid Epidemic. Synthetic opioids (fentanyl) are driving the opioid epidemic contributing to a majority of drug overdose deaths
RECAP

• **4th Wave of the Opioid Epidemic.** Opioids in combination with psychostimulants are increasing to cause a 4th wave to the opioid epidemic. Cocaine, methamphetamine deaths continue to rise in Florida for the first half of 2020.

• **Overdose rates during COVID-19.** Drug overdose deaths were on the rise before the pandemic but escalated during the early stages of national shutdowns indicated by the first half of 2020 overdose data.
RESOURCES

- Florida Alcohol and Drug Abuse Association (FADAA)
- Florida Department of Law, Medical Examiners Commission (FDLE)
- Florida Drug Related Outcomes Surveillance and Tracking System (FROST)
- ISAVEFL
- Opioid Overdose Prevention Toolkit, SAMHSA
- The Substance Use Dashboard: Florida Health Charts
- Treatment of Stimulant Use Disorder, SAMHSA
QUESTIONS?

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