Agenda Item #: 10:30Am

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

WORKSHOP SUMMARY

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Meeting Date: September 20, 2022

Department Submitted By: Community Services
Submitted For: Palm Beach County Behavioral Health, Substance Use and Co-Occurring Disorder Steering Committee

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EXECUTIVE BRIEF

Title: Presentation and Review of the Substance and Mental Disorders Plan Update, March 2022

Summary: Palm Beach County continues to experience the negative impacts of overdose deaths. In 2021, the Medical Examiner's Office reported 527 opioid-related deaths. This represents a 13 percent decrease from the 605 opioid-related deaths in 2020. However, it represents a 35 percent increase in the 447 deaths experienced in 2019. In 2019, the Board of County Commissioners (BCC) identified behavioral health and substance use disorders as a high strategic priority with a goal to establish a system of care that was person-centered and recovery-oriented in order to improve long-term recovery outcomes and quality of care. To better align with the BCC's strategic priority, the steering committee was renamed the Behavioral Health, Substance Use and Co-Occurring Disorder Steering Committee (Committee). The Committee and its sub-committees have produced an updated *Behavioral Health and Substance Use Disorder Response Plan* (Plan) that incorporates additional strategies and recommendations on addressing emergent needs in the Behavioral Health and Substance Use Disorder System of Care. The Committee regularly invited community members and stakeholder participation; analyzed their input as well as outcomes and related data; and, reports published by the County in order to produce the findings and recommendations outlined in the updated Plan. The Committee found that important strides and hard won gains have been made since 2017, but that challenges remain. The Committee's key recommendations included the continued implementation of a person-centered, recovery-oriented system of care that is readily accessible and integrated; advancement of policies, legislation; resources to support this system of care. Countywide (HH)

Background and Policy Issues: In response to Palm Beach County's opioid epidemic, the Board of County Commissioners approved a report on April 4, 2017, *Opioid Crisis: Palm Beach County's Response (ORP),* and a senior level position within County Administration to oversee the County's efforts to address the epidemic. The ORP recommended a coordinated response be created through the designation of a primary entity responsible for the integration of all efforts relative to the epidemic; the need for leadership and guidance from an experienced veteran accustomed to working on solving substance use disorders; and, the establishment of an opioid response steering committee to guide the County's work which was operationalized in 2019. The Committee resolved that it prefers to see continued reductions in overdose death, but maintains one overdose death is one too many.

Attachments: Substance and Mental Disorders Plan Update and Appendix, March 2022

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Recommended By: DocuSigned by: James E. Green BF34EF22BFDF492... 9/12/2022
Department Director **Date**

Approved By: 9/15/2022
Assistant County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2023	2024	2025	2026	2027
Capital Expenditures					
Operating Costs					
External Revenue					
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT					
No. ADDITIONAL FTE POSITIONS (Cumulative)					

Is Item Included In Current Budget? **Yes __** **No _____**
Does this item include the use of federal funds? **Yes __** **No _____**

Budget Account No.:
Fund ____ Dept ___Unit ____ Object ____ Program Code____ Program Period _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

C. Departmental Fiscal Review: DocuSigned by: Julie Dowe 05AC9C7CC5BC4A4...
Julie Dowe, Director of Finance and Support Services

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

_____ _____
OFMB Contract Development and Control

B. Legal Sufficiency:

_____
Assistant County Attorney

C. Other Department Review:

_____
Department Director

This Summary is not to be used as a basis for payment.

Substance and Mental Disorders Plan Update, March 2022

Behavioral Health, Substance Use and Co-Occurring Disorder Steering Committee

September 20, 2022

RECOVERY IS FOR EVERYONE

EVERY *PERSON*
EVERY *FAMILY*
EVERY *COMMUNITY*

RECOVERY MONTH2022

MAKING PROGRESS – THE PAST

WPTV
WEST PALM BEACH

Palm Beach County files 266-page lawsuit against dozens of companies in opioid crisis

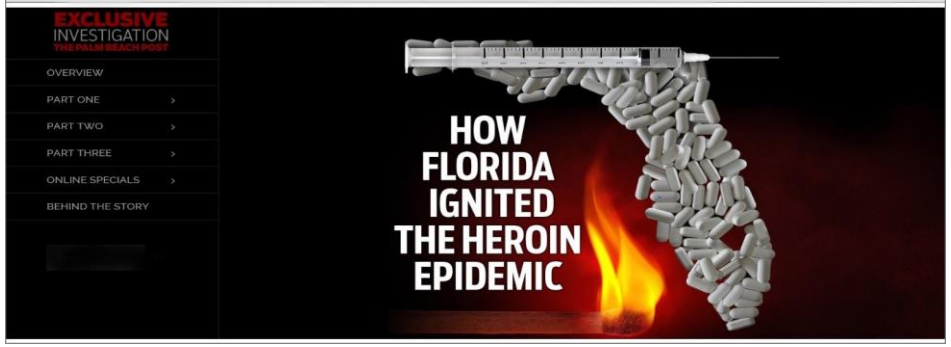
April 6, 2018

PalmBeachPost

"Largest health care fraud" takedown ever nets 124 in South Florida

June 28, 2018

PalmBeachPost

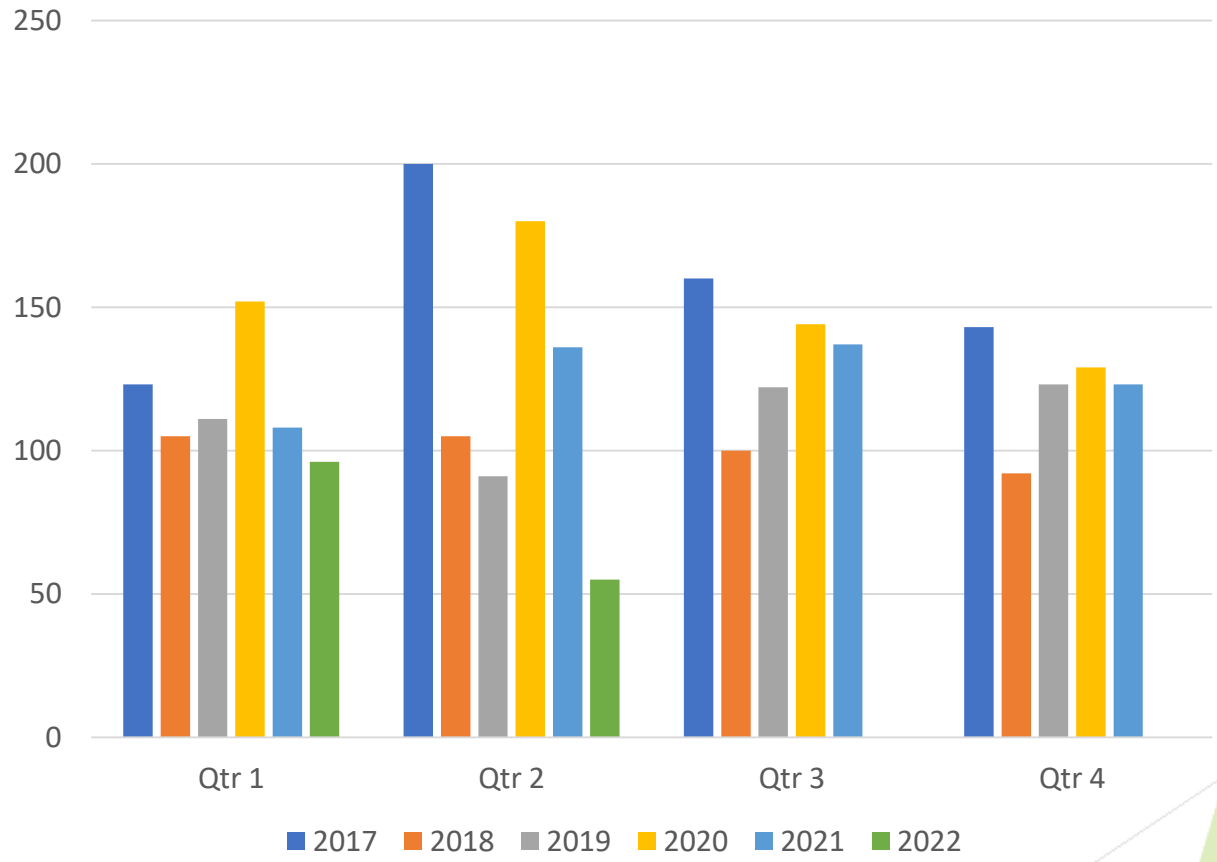


MAKING PROGRESS – THE PAST

Opioid Overdose - Annual

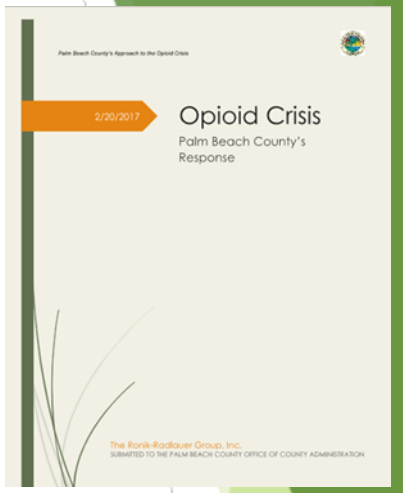
2017	626
2018	402
2019	447
2020	605
2021	527
2022 (6m)	151*
*70 pending determination	

Opioid Overdose - Quarter

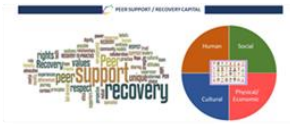


MAKING PROGRESS – MAJOR STEPS (2017 – 2022)

- *2017* - BCC adopts Opioid Response Plan
- *2018* - Drug Czar appointed
- *2019* - Health Care District opens Addiction Stabilization Unit
- *2019* - BCC sets Substance Use and Mental Disorders as Strategic Priority
- Cross-Departmental Team established
- Goal to establish readily accessible, person-centered, recovery-oriented system of care set
- System of care model designed and developed
- Recovery Capital Indexing deployed
- *2020* - BCC enacts syringe access program ordinance
- *2021* - SAP program launched
- *2022* – PBSO Narcan Policy



MAKING PROGRESS - EXECUTING THE VISION



THE HUB COMMUNITY RECOVERY palm beach county

CommonlyWELL.

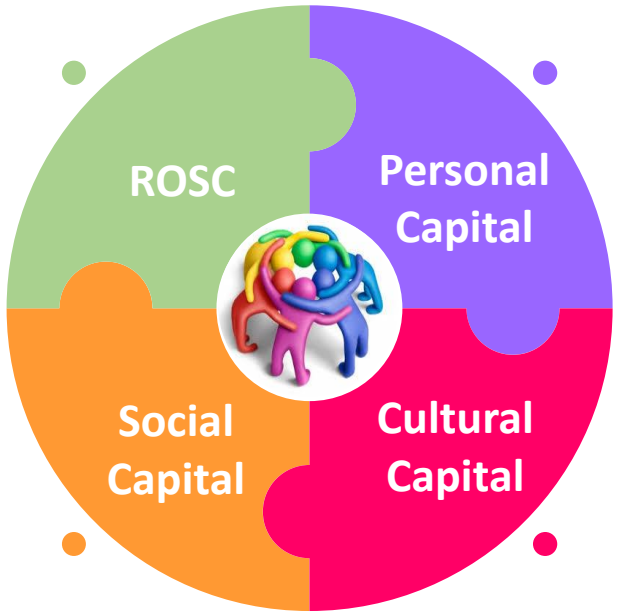
REBEL RECOVERY

PBCBHC Helping Build A Healthier Community

be well pbc

FARR Florida Association of Recovery Residences

Recovery Leadership Institute AT Hanley



daf YOUR PATHWAY TO RECOVERY

CENTER FOR FAMILY SERVICES OF PALM BEACH COUNTY, INC.

HCSEF Health Council of Southeast Florida

FAU FLORIDA ATLANTIC UNIVERSITY

Sober Homes Task Force State Attorney's Office 15th Circuit

Florida HEALTH Palm Beach County

Health Care District PALM BEACH COUNTY

Palm Beach County COMMUNITY SERVICES Helping People Build Better Communities

Southeast Florida BEHAVIORAL HEALTH NETWORK

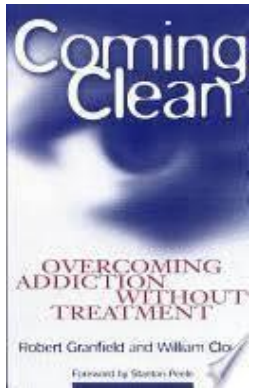
MAKING PROGRESS - EXECUTING THE VISION

Highlights

- FAA Behavioral Health
  - 8113 participants served
- The HUB
  - 1275 participants served
- Neutral Care Coordination Pilot
  - 286 participants served
- Syringe Access Program
  - 252 participants served
  - 62,461 received / 57,832 distributed
  - 77 linked to treatment
  - 1,174 Narcan kits distributed
- COSSAP
  - 130 participants served
- Recovery Capital Indexing
  - 2000 survey responses

FAA = $6.81M
ORF = $2.84M

MAKING PROGRESS – MEASURING SUCCESS

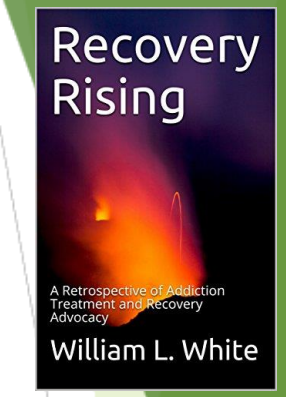


Definition

- Volume of internal and external assets
  Granfield and Cloud
- Recovery capital is conceptually linked
  William White

RCI Operationalized

- Comprehensive picture of a persons whole wellbeing
- Person-centered and scientifically validated to reliably measure addiction wellness



MAKING PROGRESS – MEASURING SUCCESS

Addiction recovery is not a binary state – lets not measure it that way.

David Whitesock, CEO
CommonlyWell

5 Highest Indicators	
Sense of Purpose	77.8
Beliefs	72.7
Safety	69
Values	68.7
Sense of Community	68.2

5 Lowest Indicators	
Financial Wellbeing	37.1
Employment	46.4
Housing/Living Situation	48.4
Nutrition	49.7
Access to Healthcare	51.5

Recovery Capital		
Social Capital	**Personal Capital**	**Cultural Capital**
Family Support Significant Other Social Support Social Mobility Healthy Lifestyle Access to Healthcare Safety	General Health Mental Wellbeing Nutrition Employment Education Housing Situation Transportation Clothing	Beliefs Spirituality Sense of Purpose Cultural Relevance Sense of Community Values
Average		
60.85	52.36	70.76

- Overall RCI Average – 61.32
- More than 2000 surveys completed
- Completion rate – 95%

MAKING PROGRESS – MEASURING SUCCESS

Individual

- Measure and inform services
- Develop recovery plan
- Demonstrate measurable outcomes.

Organization

- Needs inform opportunities
- Viewed through the lens of building recovery capital and achieving longer-term recovery outcomes

MAKING PROGRESS – PLAN UPDATE

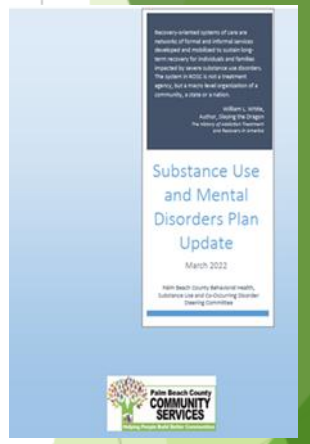
Behavioral Health, Substance Use and Co-Occurring Disorder Steering Committee

Current

- Maureen Kielian (Chair)
- Bill Lynch (Co-chair)
- Sharon Burns-Carter
- Ariana Ciancio
- Shereena Coleman
- Philip Dvorak
- John James
- P. Scott Rice
- Micah Robbins
- Brent Schillinger
- Michael Schlossman
- Rae Whitely
- Belma Andric (Ex-Officio)
- Ann Berner (Ex-Officio)
- Alan Johnson (Ex-Officio)

Sub-committees

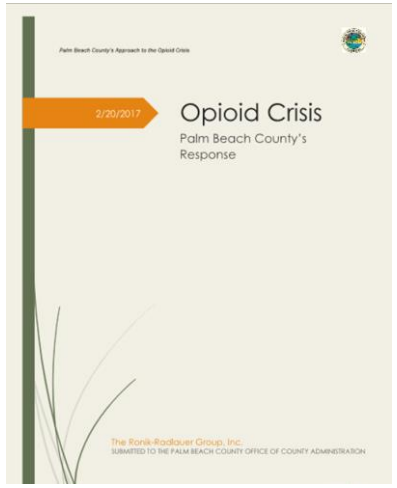
- Essential Services
- Evaluation and Monitoring
- Justice System and Public Safety
- Prevention and Education
- Public Policy and Legislation
- Treatment and Recovery



Past

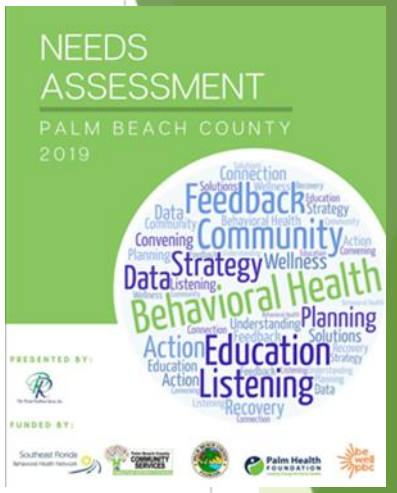
- Andrew Burki
- Sarah Gentry
- Joshua Horton
- Matthew Mossberg
- Clarice Redding-Louis
- Nikki Soda

BODIES OF WORK

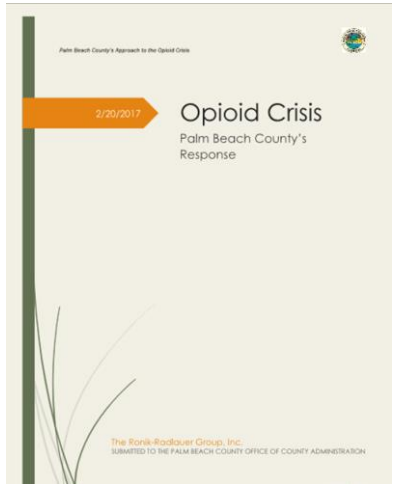


Common Findings

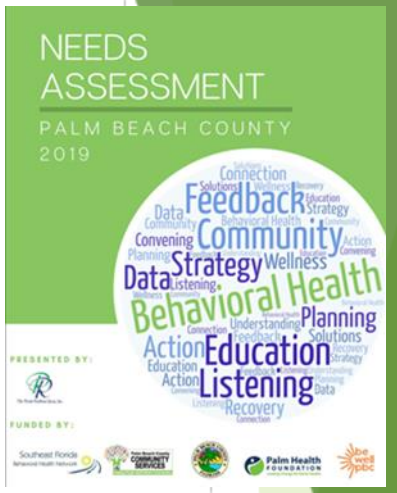
- Root causes were complex; require an integrated community response.
- Agencies operating in silos, ‘spheres of influence’.
- Need for system collaboration
- Understand interaction of co-occurrence.
- Focus on the social determinants of health; address health disparities.



BODIES OF WORK

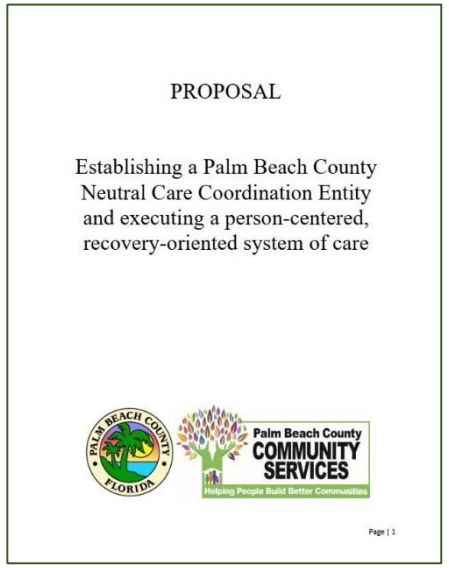


Common Recommendations



- Designation of a primary entity to create coordinated response.
- Develop central assessment and care coordination.
- Develop true Recovery-Oriented Systems of Care (ROSC).
- Expand / enhance opeer support; drop-in and recovery community centers.
- “No wrong door” approach.

BODIES OF WORK


PROPOSAL

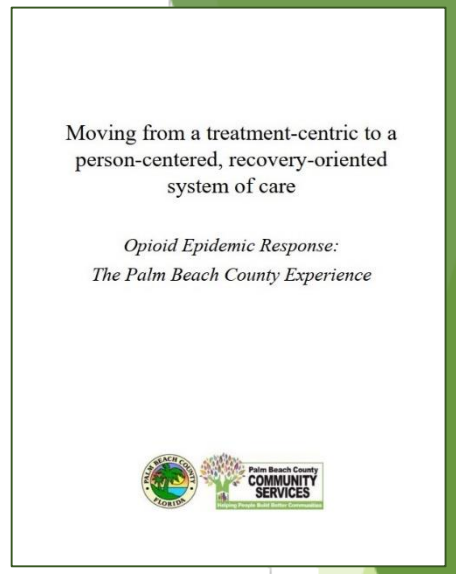
Establishing a Palm Beach County Neutral Care Coordination Entity and executing a person-centered, recovery-oriented system of care

Palm Beach County COMMUNITY SERVICES

Helping People Build Better Communities

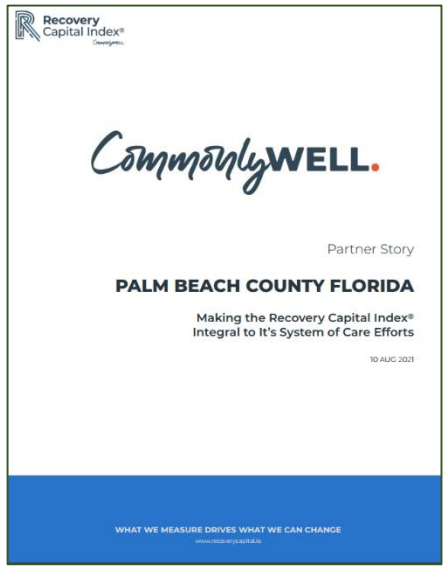
Page | 1

- Treatment-centric to person-centered, ROSC
- Neutral Care Coordination
- Making Recovery Capital Integral


Moving from a treatment-centric to a person-centered, recovery-oriented system of care

Opioid Epidemic Response:
The Palm Beach County Experience

Palm Beach County COMMUNITY SERVICES


Recovery Capital Index®

CommonlyWELL.

Partner Story

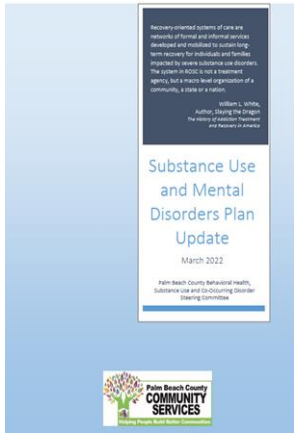
PALM BEACH COUNTY FLORIDA

Making the Recovery Capital Index® Integral to It's System of Care Efforts

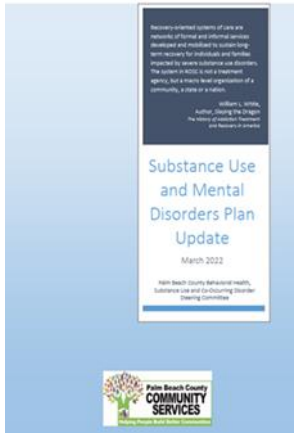
10 AUG 2021

WHAT WE MEASURE DRIVES WHAT WE CAN CHANGE

Plan Update - March 2022
Section I – Executive Summary

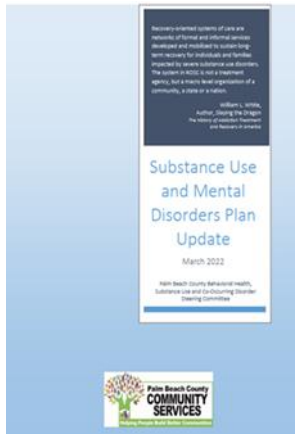


- Highlights historical basis and reasoning
- Provides high level data
- Emphasizes critical need for person-centered, ROSC
- Highlights Plan's key issues and strategies



Plan Update - March 2022 Priority Recommendations

- Designate lead entity
- Advocate and advance person-centered, ROSC through policy and legislation.
- Identify and provide sustainable resources for essential services
- Implement person-centered, ROSC that integrates Neutral Care Coordination; Care Provider Network and Recovery Supports



Plan Update - March 2022
Section II – Introduction

Mission

To ensure access to individualized person-centered, recovery-oriented care and supports through integrated and coordinated services using a "no-wrong door" approach for all Palm Beach County residents in need.

Vision

To have a fully integrated and coordinated person-centered, recovery-oriented system of care that employs neutral care coordination and recovery, as well as peer supports that focus on:

- Individual needs
- Assessment of each person holistically
- Evaluation of personal resiliency and risk factors utilizing recovery capital indexing
- Strength-based, accessible and available services to any person seeking improved outcomes for mental illness, substance use and/or co-occurring disorders.

Plan Update - March 2022
Section III – Foundational Elements

- Infrastructure needed for success
- Neutral Care Coordination
- Evaluation and analysis of data
- Contractual provisions

Plan Update - March 2022
Section III – Theory of Action

Sub-committee analysis and review

- Prevention and Treatment
- Public Policy
- Justice and Public Safety
- Treatment and Recovery
- Essential Services
- Evaluation and Monitoring

- Assessment of what issues were most critical
- Why we need to be concerned and do something about these issues
- Strategies to address
- Mechanism for accountability

RECOVERY-CENTRIC

Recovery

A “process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.”

SAMHSA’S dimensions that support recovery:

Health
Home
Purpose
Community

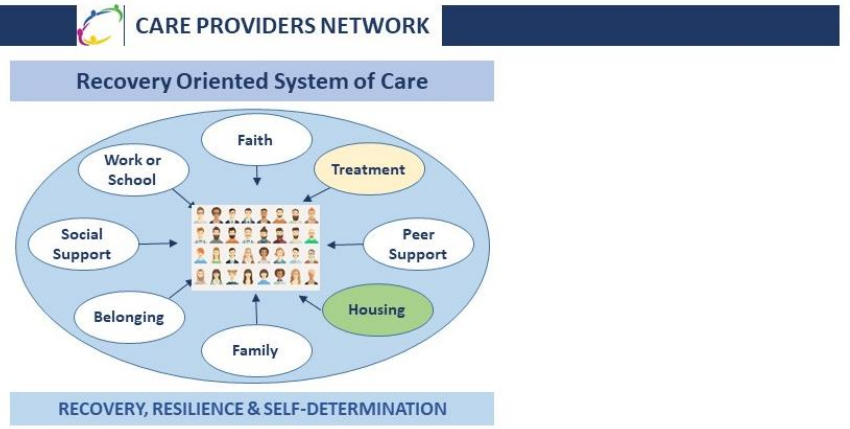
RECOVERY-CENTRIC
GUIDING PRINCIPLES OF RECOVERY

- Hope
- Person-Driven
- Many Pathways
- Holistic
- Peer Support
- Relational
- Culture
- Addresses Trauma
- Strengths/Responsibility
- Respect

PERSON-CENTERED, RECOVERY-ORIENTED SYSTEM OF CARE

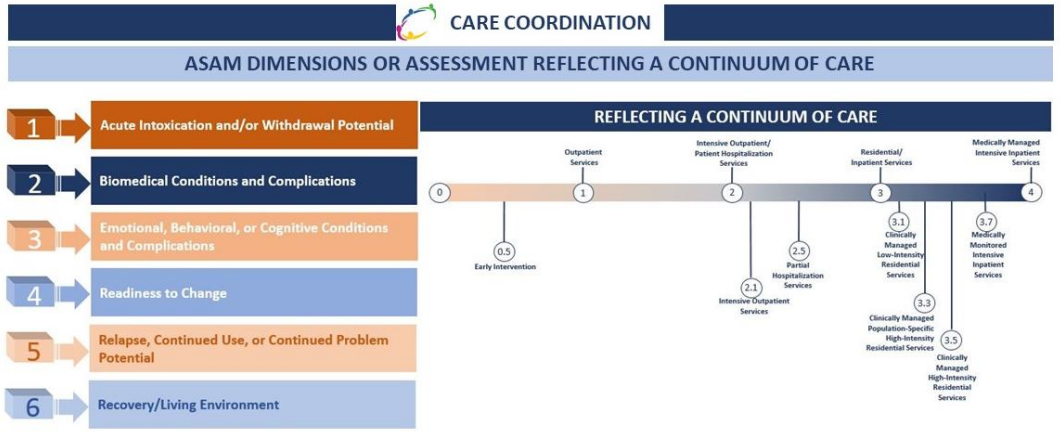
Recovery-oriented systems of care are networks of formal and informal services developed and mobilized to sustain long-term recovery for individuals and families impacted by severe substance use disorders. The system in ROSC is not a treatment agency, but a macro level organization of a community, a state or a nation.

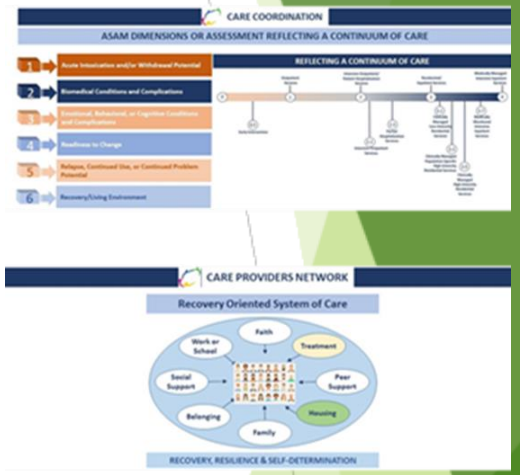
William L. White,
Author, Slaying the Dragon
The History of Addiction Treatment and Recovery in America



- Coordinated network of services and supports
- Provide self-directed approaches

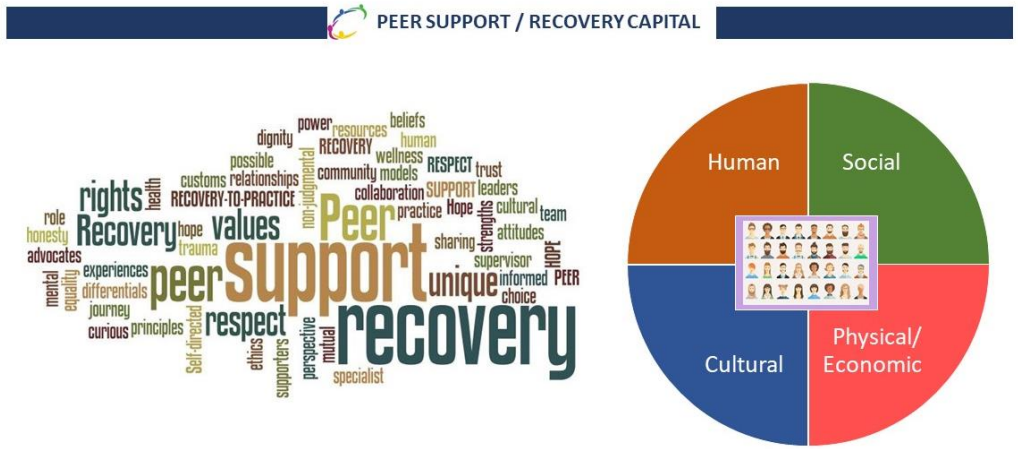
PERSON-CENTERED, RECOVERY-ORIENTED SYSTEM OF CARE





- Central to system of care
- Provide assessment, referral and care coordination
- Expand capacity; improve quality of care, long-term recovery outcomes
- Produce cost savings for re-investment

PERSON-CENTERED, RECOVERY-ORIENTED SYSTEM OF CARE



- Peer support facilitates recovery and reduces health care costs
- Recovery Capital Indexing allows for tracking of client progress and tailored support

PERSON-CENTERED, RECOVERY-ORIENTED SYSTEM OF CARE

RCO / RCC

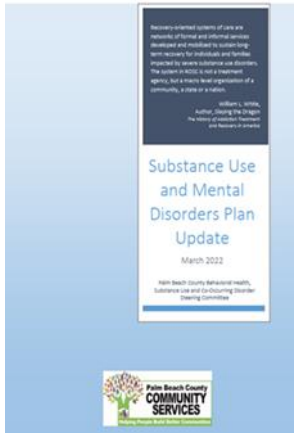
- Led by peers
- All pathways to recovery
- Provide peer recovery support services
- Access to essential resources

Outcomes

- Helps vulnerable individuals early
- Offers value to stabilized individuals
- Provides unique function to build recovery capital

"Recovery hubs facilitating "one-stop shopping" in the accrual of recovery capital."

Dr. John Kelly,
Harvard Medical School
Recovery Research Institute



Summary

- Designate lead entity
- Advance ROSC policy and legislation.
- Sustainable resources or essential services
- Implement ROSC integrating Neutral Care Coordination; Care Provider Network and Recovery Supports

Questions and Answers

2022 Substance Use and Mental Disorders Plan Update

Appendices

APPENDIX A
OPIOID CRISIS - PALM BEACH COUNTY'S RESPONSE PLAN

2/20/2017

Opioid Crisis

Palm Beach County's Response

The Ronik-Radlauer Group, Inc.
SUBMITTED TO THE PALM BEACH COUNTY OFFICE OF COUNTY ADMINISTRATION

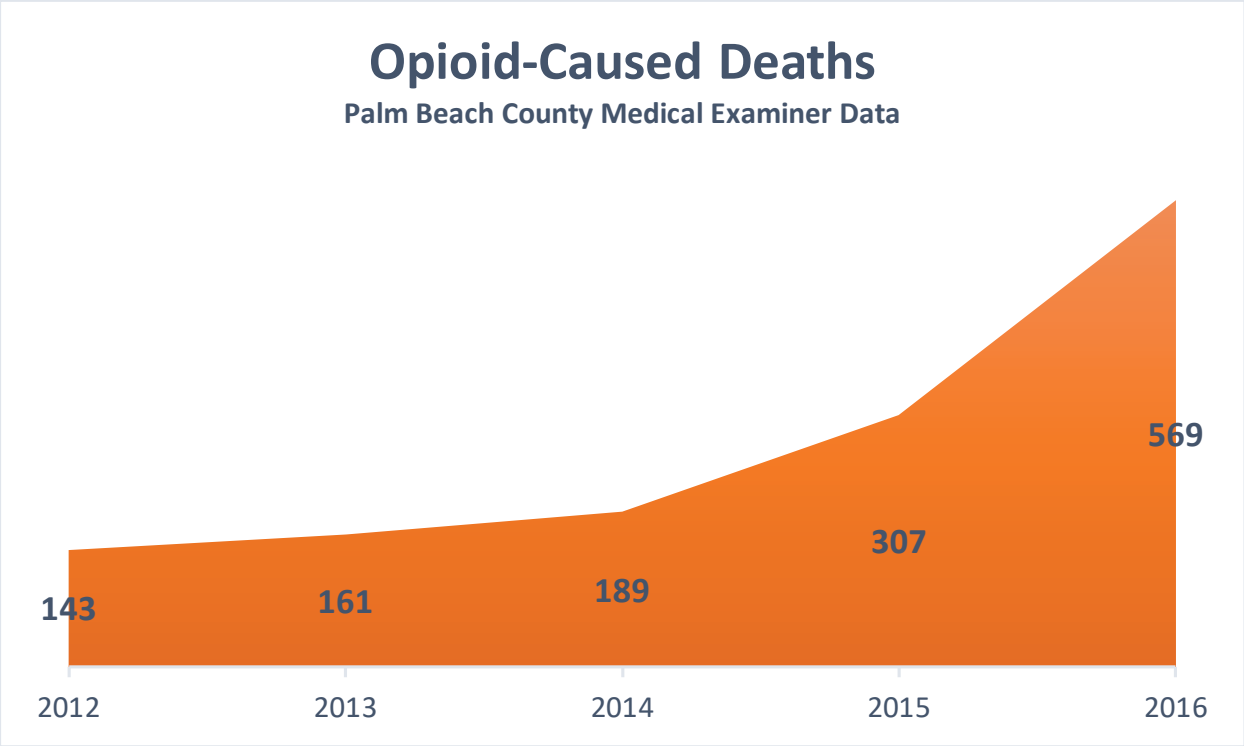
Contents

Palm Beach County's Plan to Address the Opioid Epidemic

2017

Introduction

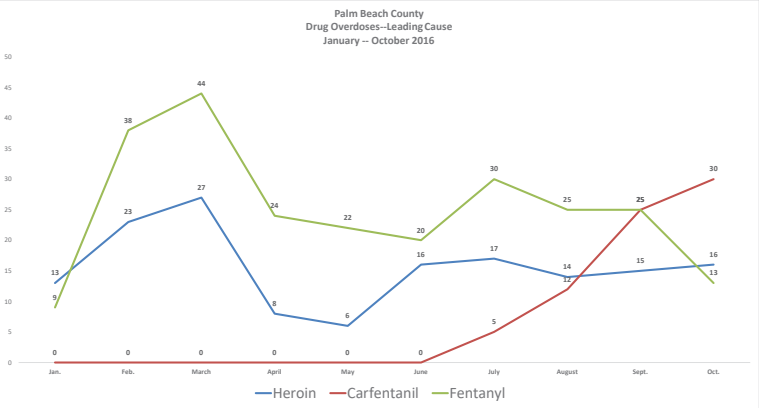
The use of opioids and their subsequent toll on individuals, families and the community has reached epidemic proportions in Palm Beach County. As a result, stakeholders have come together in a variety of settings to address this complex challenge and recommend strategies for change. In January 2017, the Palm Beach County Office of County Administration contracted with the Ronik-Radlauer Group to conduct an evaluation of these efforts and to develop recommendations for moving forward in a comprehensive, integrated manner. This Report represents an assessment of the extent of this challenge including root causes, data analysis, feedback from key stakeholders, and integration of report recommendations as well as a plan with strategic action steps for the path forward.



Alarming is the sharp increase in deaths due to the Fentanyl analogue, Carfentanil, which is 10,000 times more potent than morphine and is used as an elephant tranquilizer. Prior to 2016, Fentanyl analogues were not identified nor tracked by Medical Examiners. In 2016, there were 147 instances of these analogues in fatal overdoses in Palm Beach County.

Scope of the Problem

- The Palm Beach County Medical Examiner reports that between 2012 and 2016, there was an increase from 153 to 932 fatal overdoses where opioids were present, representing a *509% increase over the 5-year period,* while fatal overdoses where opioids were the cause of death rose from 143 to 569 during the same time period, reflecting a *298% increase.*
- Local data from the Palm Beach County Medical Examiner's Office revealed that in 2016 there were *a total of 569 opioid caused deaths* in Palm Beach County. This is compared to 2015 when there were 307 opioid caused deaths in Palm Beach County, representing 185% increase in just one year.



- According to the Florida Medical Examiner's Annual Report in 2015, *Palm Beach County led the state in heroin deaths* in 2015 with 158 deaths caused by heroin, accounting for 21% of Florida's total heroin deaths.
- The number of neonatal abstinence syndrome cases in Palm Beach County *more than doubled* from 2010 to 88 in 2014, with 74 for the first three quarters of 2015.
- Prescription drugs account for 67.7% of all drug occurrences when ethyl alcohol is excluded. In Palm Beach County in 2015, there were *394 deaths caused by prescription drugs* which is a 13% increase from 2014.
- In the 4th quarter of 2015, JFK Medical Center recorded *90 overdoses in 91 days*. In 2015, JFK Medical Center alone had as many overdoses as all of Miami-Dade County and more than all but four Florida counties. According to an administrator with the Healthcare District, *over one weekend* in November 2016, *there were over 140 overdose cases* in one hospital emergency room in one part of the County.
- In 2015 Palm Beach County Fire Rescue reported 420 naloxone admissions. This number increased to 996 in the first six months of 2016. In Delray Beach alone, firefighters have administered Narcan 1,603 times and there have been 47 heroin-related deaths (as of November 2016). Most recently, Palm Beach County Fire Rescue reported that EMS had responded to 3,753 overdoses in Palm Beach County for the period January-November 2016.
- Palm Beach County Fire Rescue increased their purchases of Narcan from 1,330 units in 2012 to 5,920 units in 2016, with costs per unit rising during the same time period. *During this timeframe, spending for Narcan increased 1140% from $18,000 to $205,000.*

Stakeholder Engagement

Many individuals, organizations, and groups participated in the analysis. We would like to acknowledge the following for their contributions:

- Florida Department of Health-Palm Beach County
- Healthcare District of Palm Beach County
- Heroin Task Force
- Palm Beach County Medical Examiner's Office
- Palm Beach County Criminal Justice Commission
- Palm Beach County Fire Rescue
- Palm Beach County Office of the County Administrator
- Palm Beach County's Sheriff's Office
- Palm Beach County Substance Awareness Coalition-Recovery Action Partnership
- Sober Homes Task Force and Proviso Group
- Southeast Florida Behavioral Health Network and providers

Summary of Recommendations

The process has resulted in the following Areas of Focus to address the challenge:

- Create a coordinated response through the designation of a primary entity responsible for the integration of all efforts relative to the epidemic
- Provide prevention and education throughout the community
- Expand options for access to treatment and provide oversight and monitoring
- Support approaches to public safety and law enforcement
- Support strategies to reduce illicit supply and demand
- Advance change through public policy and legislative advocacy
- Understand the importance of the social determinants of health and create opportunities for success through the provision of necessary ancillary services
- Generate and implement a comprehensive evaluation plan to monitor and measure achievement

Each of these Areas of Focus is discussed in greater detail in the Strategic Plan.

The Approach

The Ronik-Radlauer Group utilized a multi-method approach to collect, analyze, and synthesize the data and information used in this report. In addition to data analysis and identification of root causes, the Ronik-Radlauer Group conducted key stakeholder interviews and reviewed the recommendations from a number of entities, local and national. Each of these processes resulted in the development of smaller summary reports relative to their scope.

- Data Analysis consisted of review and evaluation of local statistics. This included information gathered from:
  - Agency for Healthcare Administration hospital admissions
  - Palm Beach County Criminal Justice Commission
  - Dept. of Children and Families Licensed Substance Use Treatment Facilities
  - Florida Charts
  - Insurance analysis conducted by Optum, a behavioral health research firm
  - Palm Beach County Medical Examiner's Office
  - National Forensic Laboratory Information System
  - Office of the State Attorney General Prescription Drug Task Force
  - Palm Beach County Fire Rescue
  - Palm Beach County Sheriff's Office
  - SAMHSA Funding proposal (Southeast Florida Behavioral Health Network)
  - SAMHSA's Treatment Episode Data Set
  - Sober Home Task Force and Proviso Group
  - Southeast Florida Behavioral Health Network Catalogue of Care and Utilization of Services
- Analysis of reports and associated recommendations from a variety of sources. These reports and recommendations included:
  - Heroin Task Force Strategic Plan
  - Sober Homes Task Force Recommendations
  - Grand Jury Report
  - Palm Beach County Substance Awareness Coalition's Recovery Awareness Partnership Recommendations
  - Local Drug Enforcement Administration (DEA) efforts
  - High Intensity Drug Trafficking Area Program (HIDTA) ODMAP initiative
  - SAMHSA funding request for Strategies to Reduce Opioid Use
  - A Prescription for Action: Local Leadership in Ending the Opioid Crisis, A Joint Report from the National League of Cities (NLC) and the National Association of Counties (NACo), 2016.
  - Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States, National Governor's Association Center for Best Practices, Washington, D.C., July 2016.
  - The Prescription Opioid Epidemic: An Evidence-Based Approach. Bloomberg School of Public Health, Baltimore, Maryland: 2015

- Key Stakeholder Interviews: A series of interviews were held with individuals and organizations who are intricately involved in addressing the epidemic. These included:
    - Alexa Lee, Palm Beach County Substance Awareness Coalition
    - Alton Taylor, Executive Director, Drug Abuse Foundation
    - Captain Houston Park, Palm Beach County Fire Rescue
    - Chief Deputy Michael Gauger, Palm Beach County Sheriff's Office
    - Darcy Davis and Dr. Belma Andric, Healthcare District
    - Dr. Alina Alonso, Florida Department of Health-Palm Beach County
    - Dr. Michael Bell, Medical Examiner, Palm Beach County
    - Judge Caroline Shepherd, Drug Court
    - Justin Kunzelman, Recovery Advocate, Rebel Recovery, Ebb Tide Treatment Center
    - Michael Hendren, Delray Beach Drug Abuse Task Force
    - Public Defender Carey Haughwout, and staff members Barbara White and Jennifer Loyless
    - State Attorney Dave Aronberg and Chief Assistant State Attorney Alan Johnson
- A root cause analysis was conducted based upon review of the above information. The following were identified as root causes of the opioid epidemic in Palm Beach County and the response to the epidemic:
    - The opioid epidemic is complex requiring a coordinated community response
    - The publicly funded treatment system is overburdened
    - Individuals addicted and in recovery are in need of access to prevention, early intervention, and evidence-based treatment and services
    - First Responders are often on the frontline of the epidemic
    - The Medical Examiner's Office is overwhelmed with the increase in number of cases
    - There is a need for legislative advocacy to impact local, state, and federal rules and laws
    - Sober Homes are unregulated and may be involved in unscrupulous business practices
    - Law Enforcement and the Criminal Justice system have been challenged to respond to the epidemic
    - There is an increased likelihood for co-morbid physical challenges such as HIV and HepC as well as psychiatric illnesses and trauma-related issues
    - The insurance industry may be a contributing factor to the opioid epidemic

The balance of this report provides a deeper overview of each of these areas, followed by a Comprehensive Strategic Plan to address the recommendations.

Data Analysis

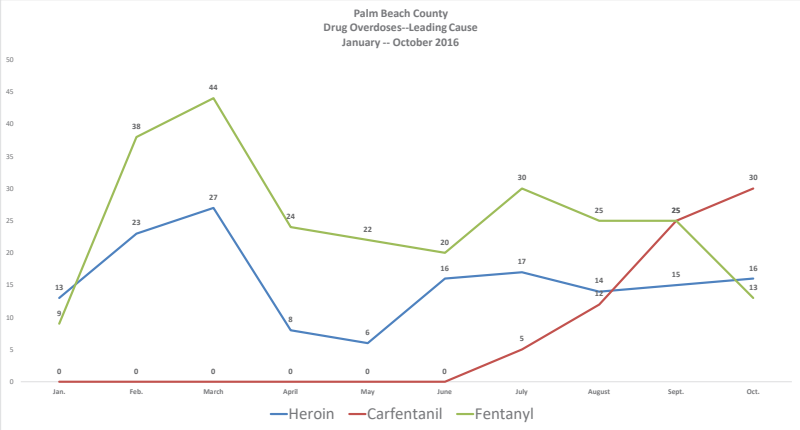
In reviewing and analyzing the data for this report, it became clear that some data sources are easily accessed, while others are more difficult and complicated. In addition, data is not consistent across sources and therefore is presented with that caveat. A recommendation is made to establish mechanisms in the County for shared data, shared measurement, and shared outcomes.

The analysis of data related to the opioid epidemic in Palm Beach County included a review of information from a variety of sources. These sources include, but are not limited to:

1. Palm Beach County Medical Examiner's Autopsy Results
2. Sober Homes Task Force Report
3. Heroin Task Force Action Plan
4. Southeast Florida Behavioral Health Network FY15-16 Client Service data
5. Southeast Florida Behavioral Health Network request for funding through the statewide Opioid State Targeted Response through the Substance Abuse and Mental Health Services Administration
6. Meetings attended: Sober Homes Task Force, Heroin Task Force, Law Enforcement Planning Council of the Palm Beach County Criminal Justice Commission
7. Nova Southeastern University, Center for Applied Research on Substance Use and Health Disparities
8. National Survey on Drug Use in Households
9. Palm Beach County Criminal Justice Commission data request
10. Drugs Identified in Deceased Persons by Florida Medical Examiners, 2015 Annual Report
11. Numbers of DCF licensed substance abuse treatment providers in Palm Beach County
12. Drug Abuse Trends in Palm Beach County Florida, July 2015
13. Optum White Paper

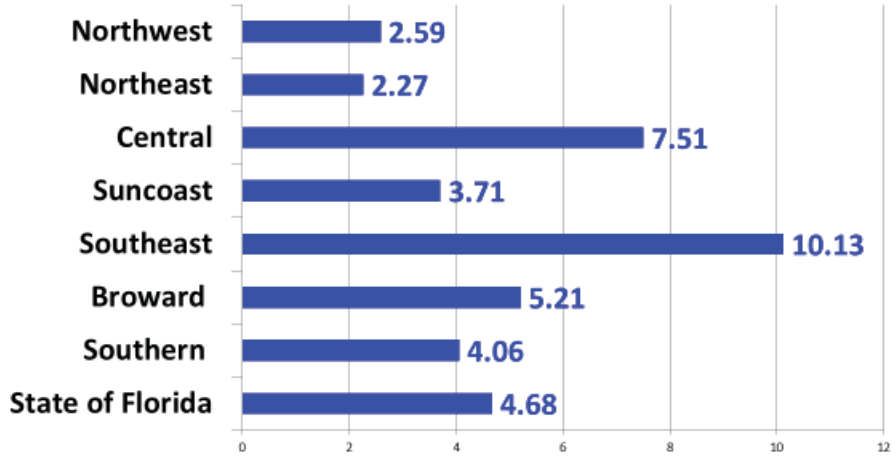
Overview of the extent of the epidemic

- The Palm Beach County Medical Examiner reports that between 2012 and 2016, there was an increase from 153 to 932 fatal overdoses where opioids were present, representing a *509% increase over the 5-year period,* while fatal overdoses where opioids were the cause of death rose from 143 to 569 during the same time period, reflecting a *298% increase.*
- Local data from the Palm Beach County Medical Examiner's Office revealed that in 2016 there were *a total of 569 opioid caused deaths* in Palm Beach County. This is compared to 2015 when there were 307 opioid caused deaths in Palm Beach County, representing 185% increase in just one year.



- In 2010, there were 262 heroin overdoses, by 2015 there were 1,271 opiate overdoses, with 453 of them fatal. In the 4th quarter of 2015, JFK Medical Center recorded 90 overdoses in 91 days. In 2015, JFK Medical Center alone had as many overdoses as all of Miami-Dade County and more than all but four Florida counties. According to an administrator with the Healthcare District, over one weekend in November 2016, there were over 140 overdose cases in one hospital emergency room in one part of the County.
- Prescription drugs account for 67.7% of all drug occurrences when ethyl alcohol is excluded. In Palm Beach County in 2015, there were 394 deaths caused by prescription drugs which is a 13% increase from 2014.
- In 2015 Palm Beach County Fire Rescue reported 420 naloxone admissions. This number increased to 996 in the first six months of 2016. In Delray Beach alone, firefighters have administered Narcan 1,603 times and there have been 47 heroin-related deaths (as of November 2016). Most recently, Palm Beach County Fire Rescue reported that EMS had responded to 3,753 overdoses in Palm Beach County for the period January-November 2016.
- Unintentional injuries are the fourth leading cause of death in Palm Beach County (Florida Charts, 2015 data) and the rate has increased steadily over the past five years. This includes automobile accidents, accidental overdoses, and unintentional suicides.
- According to the Florida Medical Examiner's Annual Report in 2015, Palm Beach County led the state in heroin deaths in 2015 with 165, accounting for 21% of Florida's total heroin deaths.

Exhibit 25 **Rates per 100,000 of Heroin-Related Deaths by Florida Management Regions: 2015**

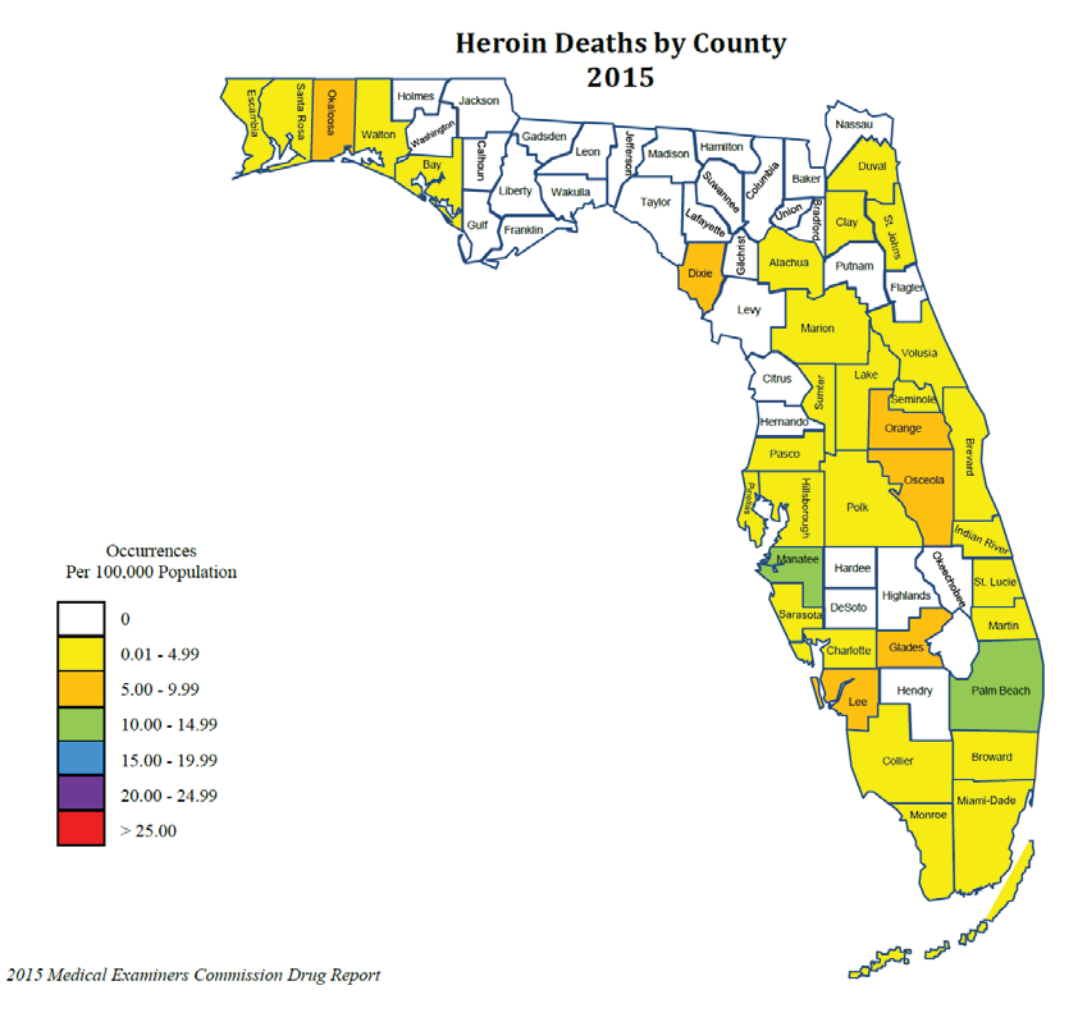


Source: FDLE – *Drugs Identified In Deceased Persons by Florida Medical Examiners* 2015 Annual Report

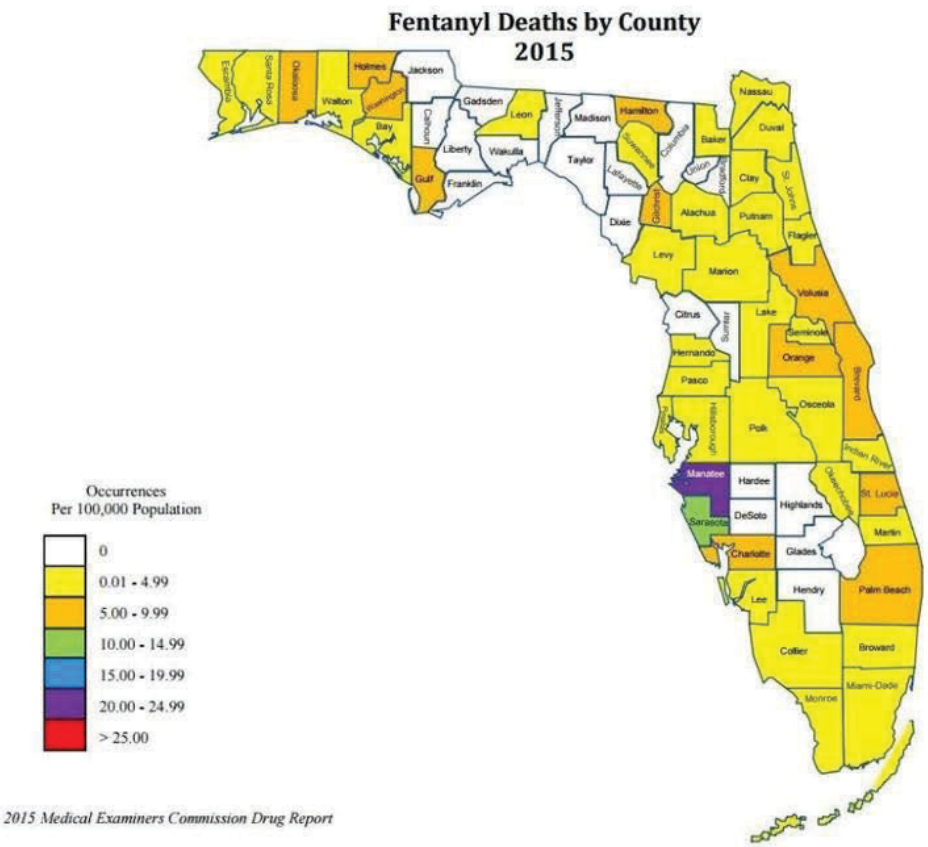
- The number of neonatal abstinence syndrome cases in Palm Beach County more than doubled in 2010 to 88 in 2014, with 74 for the first three quarters of 2015.

According to the Florida Medical Examiner's Office, in 2015, Palm Beach County had:

- a higher rate of deaths related to heroin than Broward, Miami-Dade, and Hillsborough Counties;
- a higher rate of deaths related to fentanyl than Broward, Miami-Dade, and Hillsborough Counties;
- a higher rate of deaths related to cocaine than Broward or Hillsborough Counties; and
- a higher rate of deaths related to oxycodone than Broward or Miami-Dade Counties.



2015 Medical Examiners Commission Drug Report



2015 Medical Examiners Commission Drug Report

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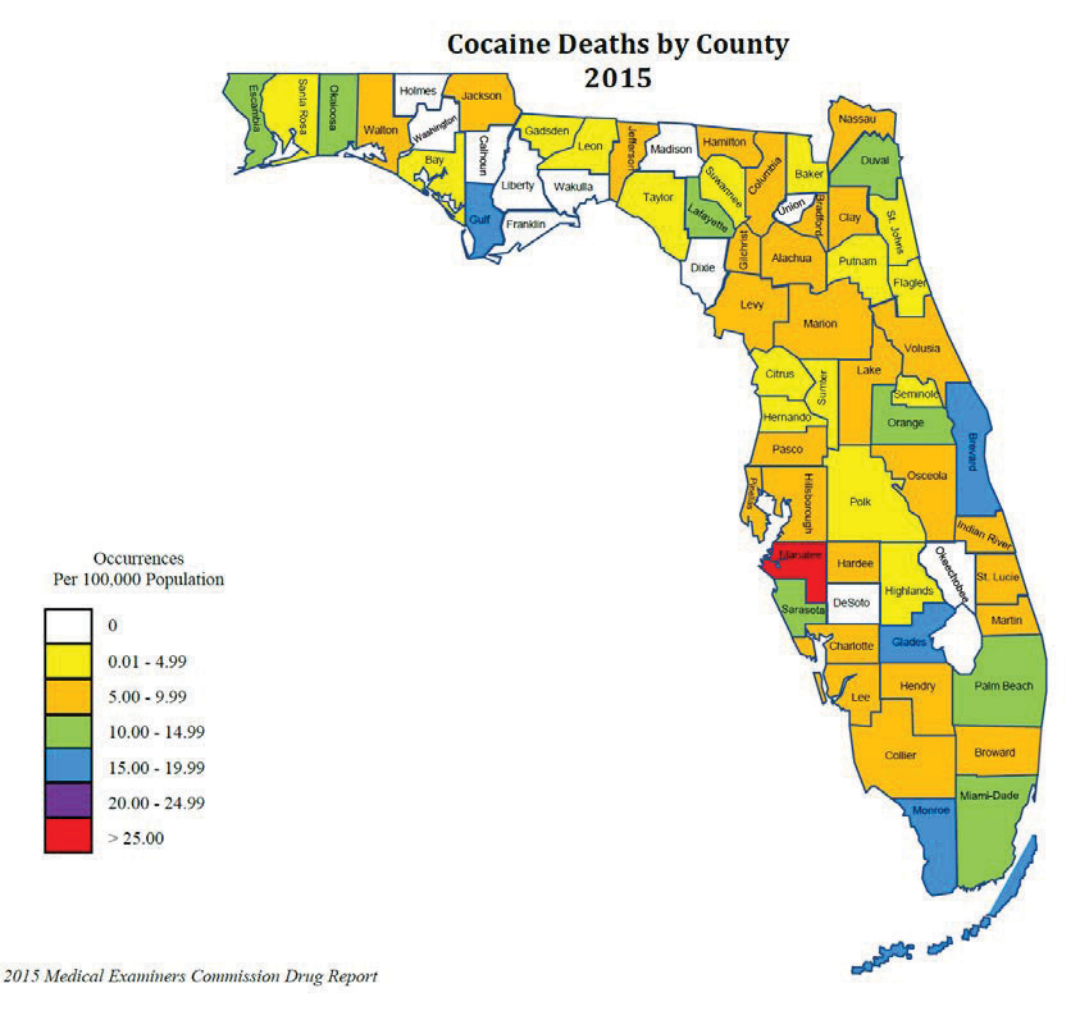
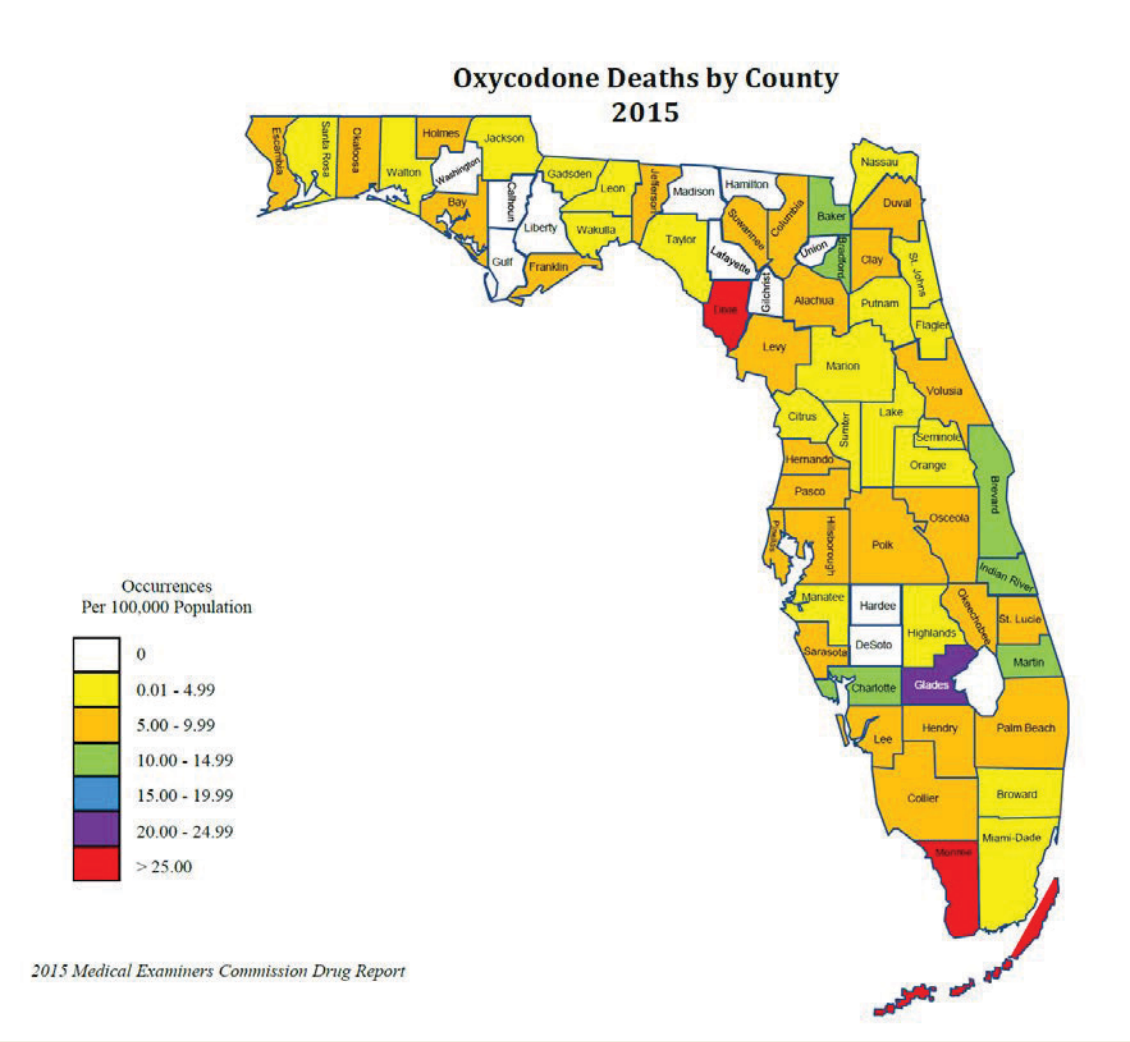
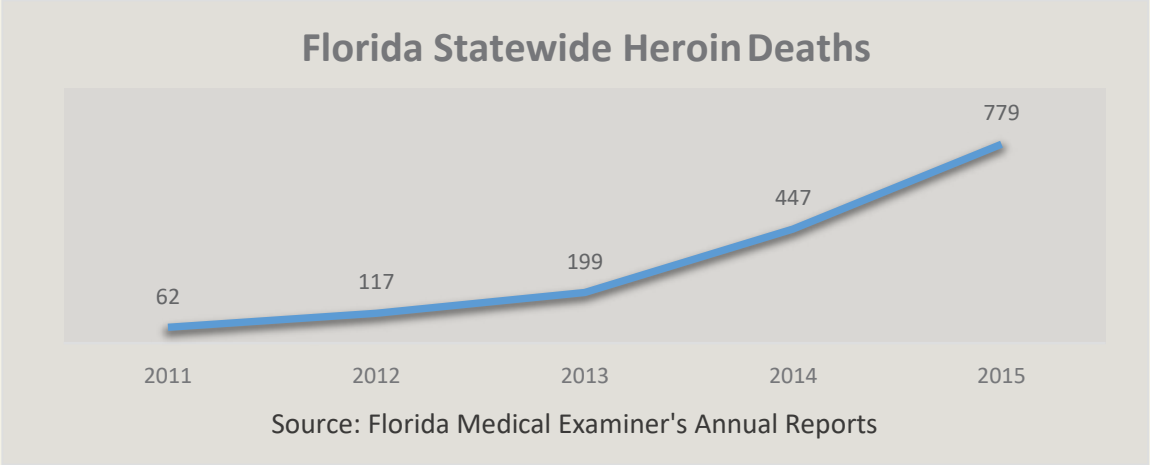


2015 Medical Examiners Commission Drug Report


Oxycodone Deaths by County
2015
Escambia
Santa Rosa
Okaloosa
Holmes
Jackson
Walton
Washington
Bay
Calhoun
Liberty
Gadsden
Leon
Wakulla
Jefferson
Madison
Hamilton
Suwannee
Columbia
Baker
Nassau
Duval
Taylor
Lafayette
Union
Bradford
Clay
St. Johns
Gulf
Franklin
Dixie
Gilchrist
Alachua
Putnam
Flagler
Levy
Marion
Volusia
Citrus
Sumter
Lake
Seminole
Hernando
Orange
Brevard
Pasco
Osceola
Pinellas
Hillsborough
Polk
Indian River
Manatee
Hardee
Okeechobee
St. Lucie
Highlands
Sarasota
DeSoto
Martin
Charlotte
Glades
Lee
Hendry
Palm Beach
Collier
Broward
Miami-Dade
Monroe
Occurrences
Per 100,000 Population
0
0.01 - 4.99
5.00 - 9.99
10.00 - 14.99
15.00 - 19.99
20.00 - 24.99
> 25.00
2015 Medical Examiners Commission Drug Report

The information cited below is excerpted from the Intelligence Summary Report: South Florida Opiate Increase, South Florida High Intensity Drug Trafficking Area Report, October 2016:

*"According to the 2015 Florida Medical Examiner's Annual Report, heroin deaths in the State of Florida increased 1156% from 2011 to 2015. **Palm Beach County led the State of Florida** in heroin deaths in 2015 with 165, representing 21% of Florida's total heroin deaths.*

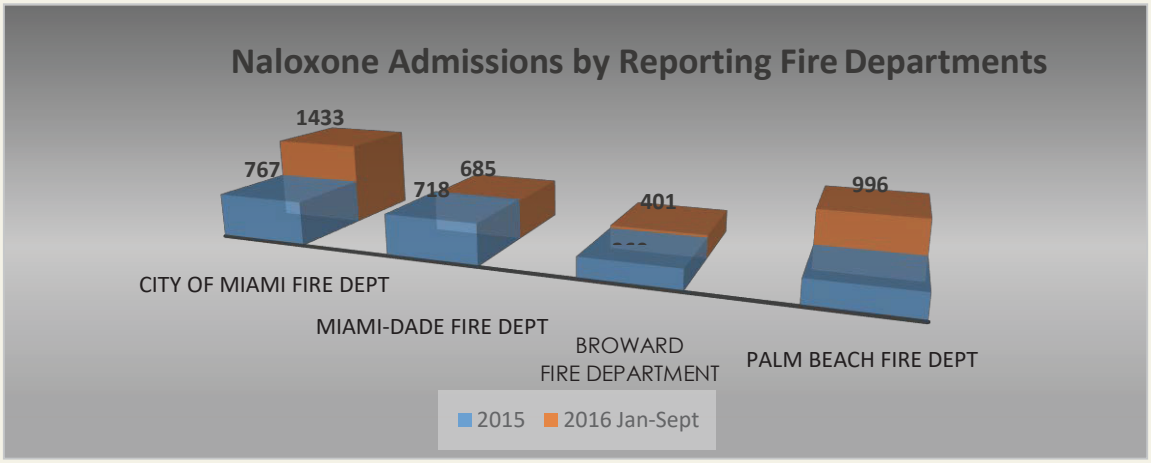


*In Florida, fentanyl-related deaths rose 286% from 2011 to 2015. The opioid epidemic is a national threat, however, states east of the Mississippi River are seeing the greatest impact. **In 2015, Palm Beach** and Miami-Dade counties were **third** and fourth in the State of Florida, among the 24 Medical Examiner's districts for fentanyl-related deaths. The 2015 collective total of the four major South Florida counties is 39 % of Florida's total fentanyl-related deaths. From 2011 to 2015, fentanyl-related deaths in Miami-Dade County increase of 628%, Broward County 446%, **Palm Beach County increased 296%** and Monroe County 59%.*

*In South Florida, from 2011 to 2015, heroin deaths in Miami Dade County increased 513% with many of the deaths occurring in the City of Miami. It is believed that transients from other areas of the state are travelling to Miami for heroin and overdosing there as a result. Likewise, **heroin deaths in Palm Beach have increased 394%** and rose 256% in Broward County.*

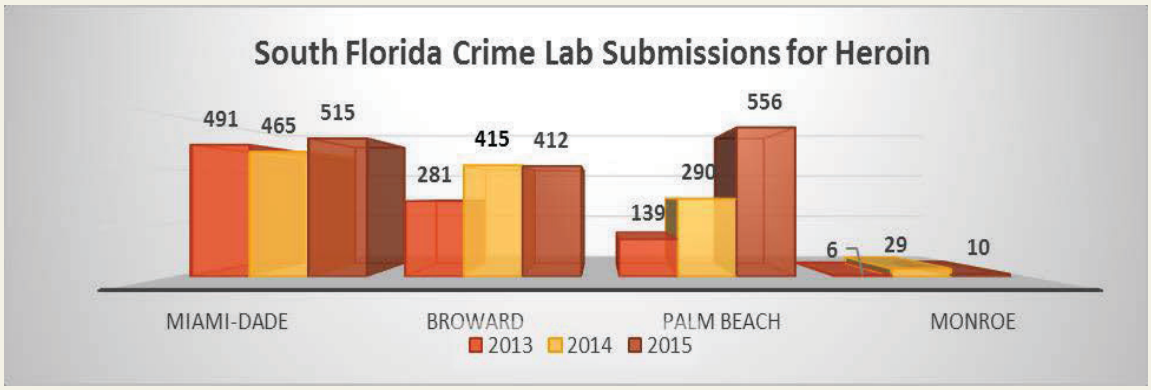
*The chart below shows naloxone admissions by regional major fire departments. Particularly alarming is in the City of Miami and **Palm Beach County** with naloxone admissions being more than double 2015's totals in only nine months of 2016. Please note that as of the time of this report (October 2016), the determination as to the precise reason for the administrations of naloxone could not be established. Sources*

advised that naloxone was used in incidents other than overdoses where breathing rates were below four breaths per minute e.g. heart attack or unconscious victims.



*Data for Palm Beach County and Broward County unavailable for 2015.

The National Forensic Laboratory Information System (NFLIS) is another indicator of opiate activity. The below chart shows heroin submissions for the four major counties in South Florida for 2013 to 2015. ***The greatest increase was observed in Palm Beach County.*** *There was an increase over the three year period of 300%. Miami-Dade County remained relatively constant and Broward County crime lab heroin submissions increased 47%. For Monroe County, a minimal change was noted for heroin submissions.*



Source: NFLIS Report dated October 3rd, 2016

Likewise, fentanyl submissions overall increased for South Florida crime labs. In Broward County, fentanyl submissions to NFLIS increased from 17 in 2014 to 41 in 2015 with Miami-Dade County submissions increasing from 3 in 2014 to 23 in 2015. Over the same time period, for Palm Beach and Monroe Counties, fentanyl submissions were not significant in numbers. However particularly for Palm Beach County, submissions of compound substances containing fentanyl are alarming. In

2015, the Palm Beach County Sheriff's Office Crime Lab received 85 submissions and thus far in 2016, there have been 371 submissions with fentanyl and other substances."

Hospital and substance use treatment admissions

- According to SAMHSA's Treatment Episode Data from 2001-2011, there was a 346% increase in admissions for opioid treatment for the State of Florida.
- There were 1,225 substance use treatment admissions for opiates *other than heroin* reported as primary treatment admissions in Palm Beach County compared to 586 in Broward County and 231 in Miami-Dade County in 2014. The 2014 admissions in Palm Beach County accounted for 21.5% of all addiction treatment primary admissions ranking second to alcohol at 34 percent. Males accounted for 55% of the prescription opioid treatment clients and 22% were between 18 and 25 years of age. 49% were aged 26-34, and 28% were 35 and older. Injecting drug use was the primary route of administration for 80% of these clients for whom a method of use was reported (n=625). Heroin accounted for an additional 10% of the 2014 primary admissions for a combined rate of 31.5% for all opiates (heroin and opioids).
- In FY15-16, there were a total of 9,301 substance use treatment admissions in Palm Beach County. Of these, 3,196 were for heroin (1,733) and other opiates (1,463), representing 34% of all treatment admissions.
- A review of AHCA data for 2015 for hospital admissions in Palm Beach County due to alcohol/drug abuse or dependence showed 2,206 admissions. The average length of stay was 2.94 days, with a total cost of care (for all payer sources) equaling $42,719,615. The average charges were $19,365 per person. JFK Medical Center had the most admissions (665), followed by Delray Medical Center (567), Jerome Golden Center for Behavioral Health (220), West Palm Hospital (218), St. Mary's Hospital (178), Good Samaritan Medical Center (149), Palms West (60), Boca Raton Regional (54), West Boca Medical Center (49), Bethesda Medical Center East (46).

Criminal Justice Involvement

The opioid epidemic affects all segments of the community, including law enforcement. A shift has taken place to focus on the misuse and abuse of opioids as a disease more than a criminal activity. A recent review of data conducted by the Criminal Justice Commission suggests that that there has been little impact on the criminal justice system for simple possession (893.13(6A)) for opioid type drugs. The data reveal a small number of individuals ever entering the system for such offenses. This does not account, however for related offenses such as theft, burglary, prostitution, etc. as well as the expenditure of resources to respond to crisis/overdose events. Between January 1, 2015 and January 29, 2017:

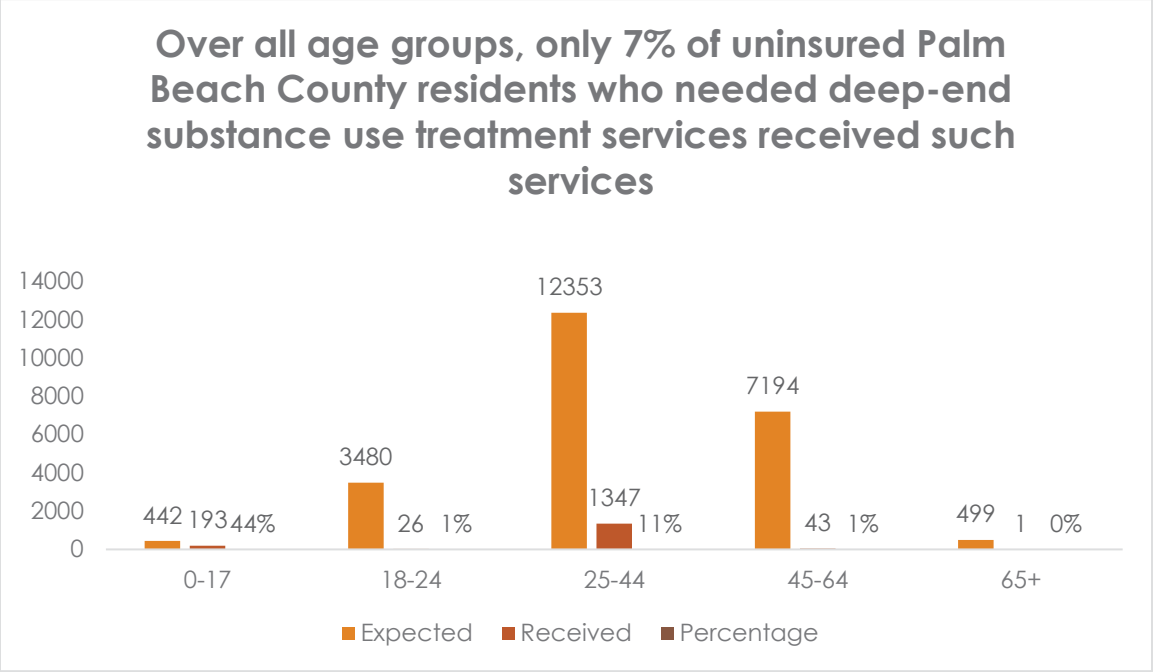
- Of the total 75,086 arrests during the time period, there were a total of 139 arrests associated with opioid charges (.185%). These include arrests related to possession of heroin, possession of oxycodone, and possession of hydrocodone. Excluded from this analysis are arrests related to trafficking, manufacturing, and possessing for the purpose of selling.

Publicly Funded Treatment Capacity

A current analysis of the substance abuse services available in Palm Beach County reveals a gaping insufficiency in publicly-funded services for the indigent population. The 11-SEFBHN contracted providers of publicly-funded treatment services represent 5% of the overall 206 substance abuse treatment providers in Palm Beach County. There are only 24 publicly funded detox beds in Palm Beach County. (SEFBHN submission to DCF for SAMHSA funding).

A recent analysis conducted by the Ronik-Radlauer Group for the behavioral health needs assessment for Palm Beach County revealed that 3,443 individuals over the age of 17 received substance use treatment services, representing *8 percent* of the perceived need for substance use treatment services for the uninsured in Palm Beach County (National Survey on Drug Use in Households).

While over 24,000 uninsured individuals would be expected to receive "deep end" substance use treatment services (detoxification and residential treatment services), only 2,206 uninsured Palm Beach County residents received such services in FY15-16.



There is currently a waiting list for publicly funded treatment services, particularly for deep-end detoxification and residential treatment services. The following provides an overview of the publicly funded substance use treatment services in Palm Beach County, with their capacity and waiting list information (dated January 3, 2017).

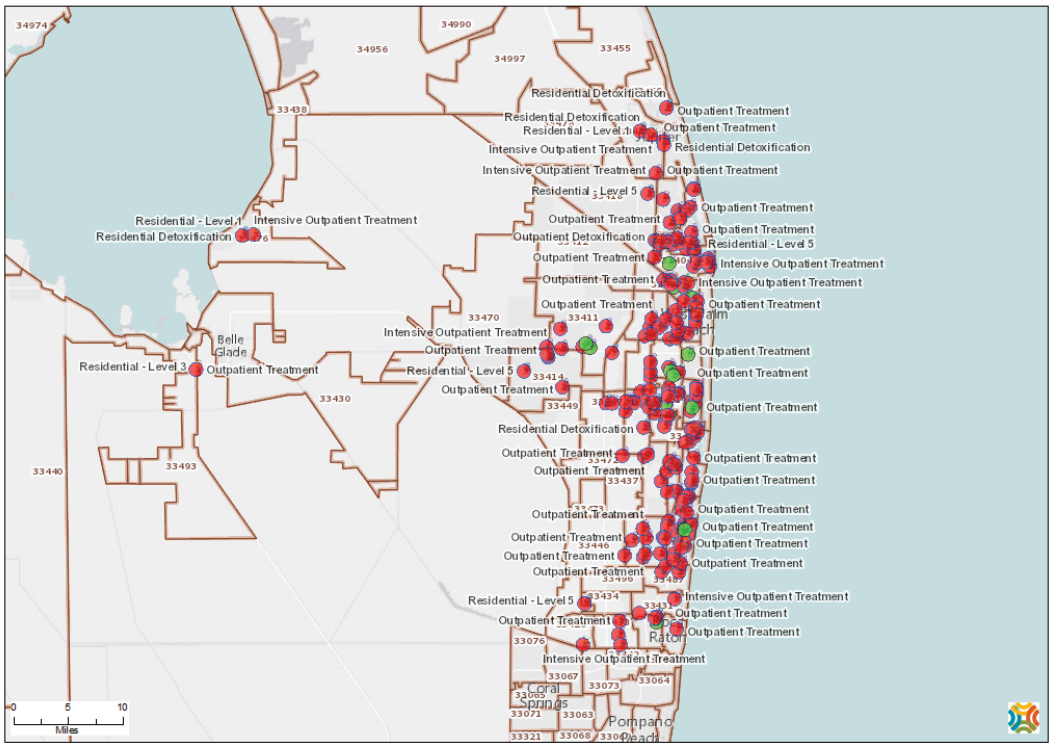
The following provides an overview of publicly funded treatment providers with their primary address, current capacity and waiting list, if applicable.

Organization	# Served in FY15-16	Detoxification Beds (Capacity)	Residential Beds (Capacity)	Outpatient and Crisis Support Slots (Capacity)	Waiting list-cumulative
Drug Abuse Foundation of Palm Beach County (DAF) 400 South Swinton Avenue Delray Beach, Florida 33444	790	22	130	Outpatient: 250 Crisis Support: Almost 5,000 visits for Crisis Support. 5 beds available for evaluation, triage, and referral	186 (Residential Level 2)
Wayside House 378 NE 6th Avenue Delray Beach, FL 33483	205	N/A	28	N/A	16 (Residential Level 2)
Jerome Golden Center for Behavioral Health 1041 45th Street West Palm Beach, Florida	257	4	30	N/A	N/A
Gratitude House 1700 N. Dixie Highway West Palm Beach, Florida	352	N/A	11	20	N/A
Housing Partnership 2001 Blue Heron Blvd. Riviera Beach, Florida 33404	256	N/A	36	N/A	N/A
TOTAL	1860	26	235	275	202

An analysis was conducted by the Ronik-Radlauer Group about the locations and types of services of all DCF-licensed substance use treatment facilities in Palm Beach County.

The following map provides an overview of those locations. While licensed by DCF, it should be noted that DCF does not currently have the capacity to provide adequate oversight and monitoring of all locations. In addition to these treatment facilities, it is estimated that there are currently over 500 sober home locations maintaining capacity for 6,880 occupants (Florida Association of Recovery Residences).

DCF Licensed Substance Abuse Treatment Facilities, Palm Beach County, October 2016



Map Legend

DCF Licensed Substance Abuse Treatment Facilities

- Intensive Inpatient Treatment
- Intensive Outpatient Treatment
- Medication And Methadone Maintenance Treatment
- Outpatient Detoxification
- Outpatient Treatment
- Residential - Level 1
- Residential - Level 2
- Residential - Level 3
- Residential - Level 4
- Residential - Level 5
- Residential Detoxification
- Residential Methadone Detoxification

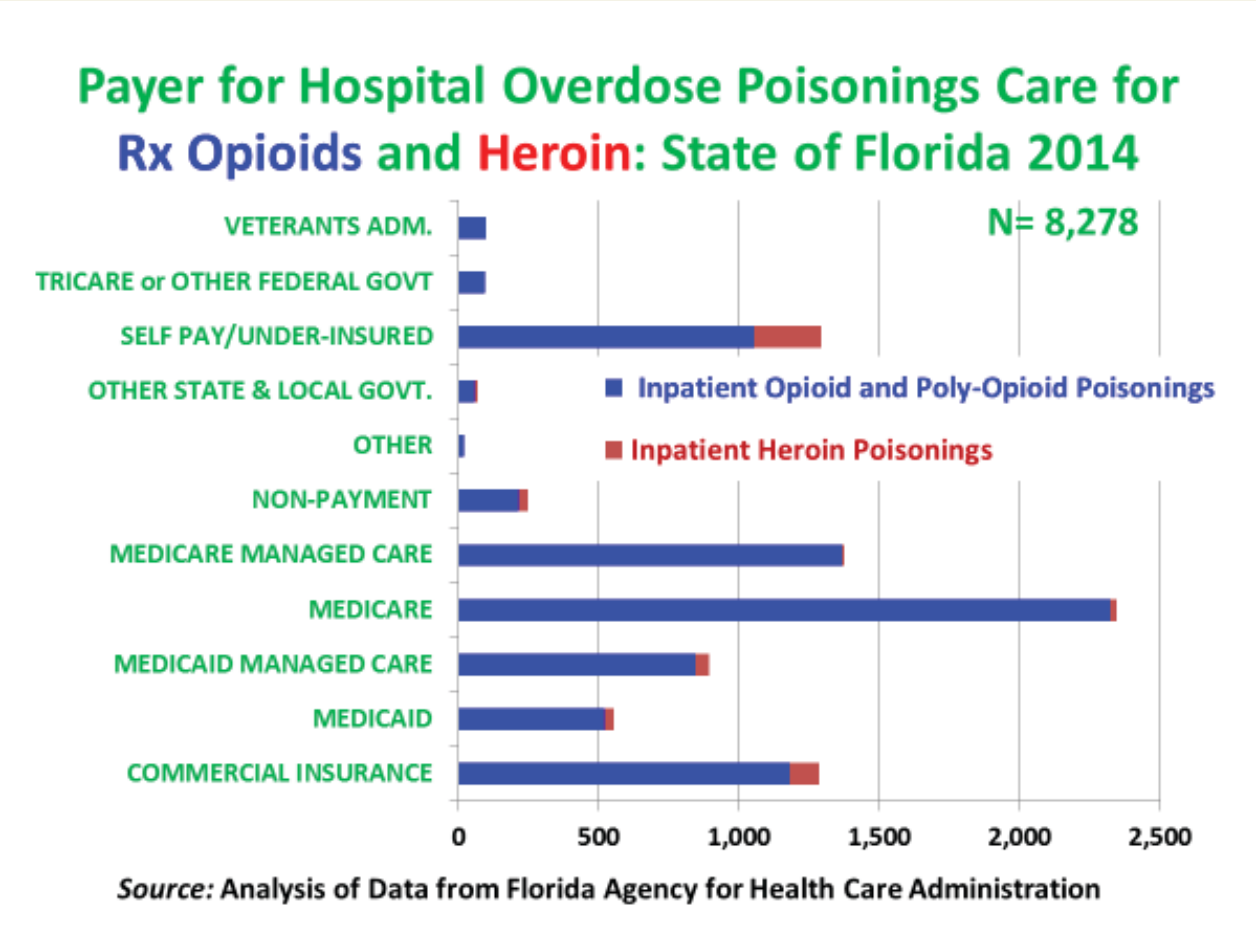
Licensed Substance Abuse Treatment Facilities Palm Beach County 2016

- Private
- Public

Community Commons, 1/28/2017

Insurance

- A behavioral health research firm, Optum, estimates that of 2013 insurance claims for substance abuse treatment in Florida for 18-25 year-olds, nearly 75% were not Florida residents.
- Recent analysis conducted by AHCA reveals that in addition to the heroin overdoses, attention must continue to be paid to the prescription opioids and subsequent overdoses. It is noteworthy that the primary payer for hospital overdoses for prescription overdose poisonings was Medicare, signifying the need to focus on challenges of the older adult population. Although this data is currently statewide, attempts will be made to access county specific data.



Source: **Analysis of Data from Florida Agency for Health Care Administration**

Stakeholder Interviews

The Ronik-Radlauer Group conducted a series of key stakeholder interviews with individuals critical to addressing the opioid epidemic in Palm Beach County. A focus group was also held with the Recovery Action Partnership, a group of individuals (parents, persons in recovery, treatment providers, and community stakeholders) to discuss strengths and challenges as well as plans to move forward. Interviews were held with:

- Alexa Lee, Executive Director, Palm Beach County Substance Awareness Coalition
- Captain Houston Park (Palm Beach County Fire Rescue)
- Chief Deputy Michael Gauger, Palm Beach County Sheriff's Office
- Darcy Davis and Dr. Belma Andric, Healthcare District
- Dr. Alina Alonso, Florida Department of Health-Palm Beach County
- Dr. Michael Bell, Medical Examiner, Palm Beach County
- Judge Caroline Shepherd, Drug Court
- Justin Kunzelman, Recovery Advocate, Rebel Recovery, Ebb Tide Treatment Center
- Michael Hendren, Delray Beach Drug Abuse Task Force
- Public Defender Carey Haughwout, Barbara White and Jennifer Loyless
- State Attorney Dave Aronberg and Chief Assistant State Attorney Alan Johnson

Interviews were conducted between January 9, 2017-February 10, 2017. The aggregate findings of the stakeholder interviews are as follows:

Strengths of the existing system

- Palm Beach County Administration's interest in developing solutions and working collaboratively with community partners
- Commitment on many levels by a diverse group of stakeholders to solve the complex community challenges related to opioid use and abuse
- Resources from the legislature to fund the State Attorney's initiative to focus on the treatment industry and sober homes
- Suboxone pilot project supported by the community through existing dollars
- The Criminal Justice Commission is bringing the Law Enforcement community together to focus on the challenge
- Research on Medication Assisted Treatment will expand continuum to include outpatient options
- Drug Court has robust outcomes
- Drug Court has committed treatment providers that allow access to services, including psychiatric, with assessments conducted on-site at Drug Court
- A group of committed treatment providers are interested in creating a peer review protocol to monitor treatment services
- The State Attorney's Office has worked with the Sober Homes Task Force, the Heroin Task Force and the Grand Jury to identify legislative changes to impact the system
- The Heroin Task Force has robust involvement and commitment- representatives from diverse organizations are at the table

- The State Attorney's Sober Home Task Force enforcement initiatives have resulted in the arrests of several "bad actors" in the substance use treatment industry
- The Palm Beach County Substance Awareness Coalition is working to create materials to assist families in accessing services
- The Palm Beach County Substance Awareness Coalition is engaging the Palm Beach County School system through prevention curriculum
- Prevention services are provided at Palm Beach County schools through DATA (Drug Abuse Treatment Association), a contracted SEFBHN provider
- Individuals with lived experience, people in recovery, peer specialists and family members are engaged in the process
- Numerous materials have been reviewed, including the National League of Cities/National Association of Counties and the National Governor's Association to support evidence-based practices
- The Medical Examiner is a partner in using data to focus on solutions
- The Medical Examiner's office is creating an application to track data about overdoses, suicides and deaths
- The Florida Department of Health in Palm Beach County is an engaged partner and is supportive of the initiative, particularly regarding the co-morbidity of HIV, HepC and other communicable diseases
- The Palm Beach County Sheriff's Office is integrally involved and has engaged social workers as partners in their community policing efforts
- Judge Shepherd had staff trained to administer Naloxone at Drug Court when necessary
- The Healthcare District is expanding their resources to support people with substance use issues
- A support system and phone number has been created to assist when people change or lose their sober home accommodations

Challenges of the existing system

- Need more treatment beds for uninsured and underinsured
- Length of stay in residential does not meet the needs (LOS based on insurance)
- Need sober housing for teens
- Need training for Emergency Room doctors, nurses and techs about how to work with individuals who are abusing substances
- Palm Beach County citizens cannot access treatment services in Palm Beach County due to the influx of out of state participants
- Florida based insurance (i.e., Florida Blue) pays less for in-state treatment so treatment centers prefer to fill beds with out-of-state people
- Only two (2) of the twenty-five (25) (Boynton Beach and Delray Beach) local law enforcement agencies in Palm Beach County use Naloxone in the community
- The Community needs to be further engaged in carrying and utilizing Naloxone
- Families do not know where to turn to get help for access to treatment

- There is a lack of safe, stable, and affordable housing options in the community (people are homeless or end up in unstable housing situations)
- There are not enough residential beds to support discharge from the hospital
- Marketing practices of some for-profit treatment centers may put clients at risk
- Need local support for clean needle exchange programs
- Limited services are available in Belle Glade
- Need additional funding for enhanced urinalysis testing in Drug Court
- Number of substance related deaths has recently increased significantly
- Emergency room toxicology screenings should be updated and improved to assist the Medical Examiner in their autopsy review
- Medical Examiner lacks capacity to meet the increased volume of overdose deaths
- Rebuild publicly supported substance abuse crisis response and treatment services to restore capacity lost over the past 10 years (as much as 60%) due to the closure of the SAAP/Drug Farm and CARP.
- Between March 2015 and March 2016, there were a total of 60 individuals incarcerated from Drug Court who were waiting for a community residential treatment bed. They were incarcerated for an average of 11.6 days at a cost of $135 per day, for a total cost of $93,825.
- In order to meet the need, nonprofits need the resources to build services to insure immediate access to treatment for individuals abusing substances
- Not all for-profit treatment providers are accountable to clinical standards through monitoring and evaluation
- The community needs to build capacity to provide Medication Assisted Treatment
- Out of state individuals come to Palm Beach County for treatment and if they are not successful they do not always return to their home state

Opportunities for the existing systems

- DCF in Tallahassee is applying for a federal SAMHSA grant and SEFBHN has submitted local program ideas and needs and request for funding
- Palm Beach County's Criminal Justice Commission is exploring options to expand the number of Drug Court treatment beds through its upcoming MacArthur Safety and Justice Challenge grant application in an effort to reduce the numbers of individuals remaining in jail while waiting for residential treatment
- Palm Beach County Sheriff's Office is applying for a Department of Justice grant
- The Palm Beach County Substance Awareness Coalition has compiled a database of existing DCF-licensed locations including insurance information (although the information has not been vetted)
- Opportunity to revisit the concept of the Drug Farm or a similar type program for incarcerated individuals who have substance use challenges
- The system continues to find new ways to evolve once a problem is solved (drugs change and practices change continually)
- More providers are interested in working in the Drug Court system

- Opportunities exist to educate the community about the effects of opioids on the brain and body
- Look to create "damp" housing in Palm Beach County
- Further data about opioid deaths to include psychological autopsies is needed for future planning
- Opportunity for Florida to join the National clearinghouse for substance abuse treatment centers
- Design a system with enhanced substance abuse licensure requirements and oversight
- Increase the cost per license to offset the costs of oversight
- Look to institute evidence-based practices such as a LEAD-like program or harm reduction model in Colorado
- Syringe exchange programs have the potential to reduce the incidence of HIV, HepC and other communicable diseases
- Utilize the Angel program for Palm Beach County residents
- Manage the number of substance use treatment providers based on Palm Beach County need
- Rebel Recovery is hiring peer specialists to work with clients in need of support
- DEA is involved in the system to try to decrease access to illegal substances
- The system is tracking overdoses through an application to identify overdose sites
- The current Task Forces have brought the community together to begin collective impact work regarding opioid overdoses
- Data is available that can be used to apply for funding and grants
- Work with University of Miami to learn from their clean needle exchange program

Barriers for the existing system

- Florida is 49th out of 50 states in mental health per capita funding
- There are funding, legal and political barriers to creating a needle exchange program
- The number of treatment facilities outpaces the capacity for DCF program specialists to monitor those facilities
- Marketing practices have interfered with the system's ability to treat individuals
- Out of state clients come to West Palm and utilize local beds that could support the internal needs of Palm Beach County
- The current laws and rules need to be changed to address the current challenges (i.e., marketing practices)
- Once the laws change, the illegal practices change so the system needs to be vigilant

Local Initiatives' Recommendations

There are currently three (3) county-wide initiatives that are addressing the opioid epidemic. These initiatives include the Heroin Task Force, the Sober Homes Task Force and Proviso Group, and the Palm Beach County Substance Awareness Coalition's Recovery Action Partnership. Each of these initiatives, while working independently, are interconnected. Each have developed their own set of recommendations. These recommendations have been incorporated into the larger Strategic Plan. The following provides an overview of those initiatives and their recommendations.

Heroin Task Force

The Heroin Task Force was initiated in May of 2016 when a group of Palm Beach County stakeholders initiated a collaborative response to develop protocols and approaches for prevention, treatment, first responders and law enforcement to address the growing problem. The Task Force is composed of individuals and organizations across many disciplines who have come together to develop both short and long-term strategies to prevent abuse, addiction, overdose and to improve access to different types of treatment for opioid addiction. The Heroin Task Force developed an Action Plan to help Palm Beach County identify the resources, gaps in services and funding that are needed to tackle this escalating health crisis. The community stakeholders include Palm Beach County Fire Rescue, Palm Beach Sheriff's Office, Southeast Florida Behavioral Health Network, JFK Medical Center, Health Care District, Criminal Justice Commission, 15th Circuit Court, State Attorney's Office, Drug Abuse Foundation, Delray Medical Center, Delray Beach Police Department, Boynton Beach Police Department, DCF, PBC Substance Awareness Coalition, Nova Southeastern University, City of Lake Worth, County Commissioners Office, Florida Harm Reduction Initiative, The Treatment Center, Grace's Way Recovery, The Good Life Treatment Center, South Florida HIDTA and the Palm Beach Post. The following represents an overview of the strategies that have been proposed by the Heroin Task Force to address the epidemic.

Heroin Task Force Recommendations

1. Administrative Strategies
    a. Engage the County and Department of Health to elevate to a Public Health Crisis
    b. Coordinate efforts to focus on public and private partnerships that leverage existing resources to facilitate visible treatment and recovery support services that are easily accessible and affordable.
    c. Integrate data management, reporting and analysis
    d. Information dissemination: Community engagement, education and outreach
    e. Media engagement
2. Prescribing and Prescription Monitoring Prevention
    a. Educate Doctors/Hospitals on prescribing practices–compliance with CDC prescribing guidelines
    b. Provide education of safe prescription and over the counter products use and secure storage of medications
    c. Promote locations of disposal sites for prescription medication
    d. Increased use of the Prescription Drug Monitoring Program
3. Schools & Communities

   a. Create a Strategic Prevention Framework to educate all sectors, and develop a Prevention plan for Community, Parents and Schools, including colleges and universities.
   b. Monitor future Florida Youth Substance Abuse Survey to evaluate who is most vulnerable and who should be targeted for Prevention programming.

4. Harm Reduction
   a. Education on safe needle usage
   b. Education/ Promotion of syringe exchange programs
   c. Education on the danger of new poisonous opiate analogs and trends

5. Overdose Prevention
   a. Increase access to naloxone through pharmacies and law enforcement
   b. Support/Provide Cross-sector trainings and trainings for families and significant others on naloxone usage
   c. Provide Education and public awareness about the Good Samaritan Law
   d. Collaborate with hospitals to provide referrals/discharge plan for individuals who have overdosed

6. Criminal Justice
   a. Diversion PRIOR to arrest is optimal. The Criminal Justice Commission is working with law enforcement agencies on a pilot program.
   b. Increase Utilization of the Marchman Act (need Addictions Receiving Facility and secure residential beds)
   c. Implementation of the Designer Drug Enforcement Act
   d. Enhance community enforcement
   e. Consumer Protection laws and ADA/FHA considerations in enforcement

7. Housing and Homelessness
   a. Increase the capacity of certified sober homes
   b. Increase access to Homeless Shelters
   c. Institute "Voucher Return Program" for individual brought to this area for rehab, but now have no means to return home.

8. Stabilization and Treatment
   a. Increase funding to expand treatment facilities and services
   b. Increase access to Medicated Assisted Treatment (MAT)

9. Crisis Stabilization
   a. Increase number of non-secure Detox beds
   b. Add secure detox bed capacity – (20-bed addictions receiving center)
   c. Increase number of Acute Care Residential Level 1 beds
   d. Implement specialized suboxone detox component for targeted opiate abuser

10. Residential Treatment
    a. Increase number of male Level 2 Residential Treatment Beds
    b. Increase number of male Level 4 Residential Treatment Beds
    c. Add secure level 2 Residential Treatment capacity in coordination with PBSO
    d. Increase special residential services for pregnant women

11. Non-Residential Treatment
    a. Expanded Integration of Medication Assisted Treatment into all levels of residential care using Naloxone and Vivitrol
    b. Fully Implement Medication Assisted Treatment for Outpatient Care
    c. Implement Medication Assisted Treatment – Day/Night Component

12. Special Initiatives
    a. "Reversal Centers": Suboxone Pilot Project - PBC Fire Rescue, JFK Medical Center, Southeast Florida Behavioral Health Network, Health Care District, DAF
    b. DAF – PBSO Initiative in Lake Worth
    c. Encourage hospitals to do more with the patients they treat after an overdose
    d. Establish Coordination of care by utilizing case managers and peer specialists in hospitals
    e. Increase bed capacity through scholarship beds at for-profit providers to help divert consumers into treatment immediately following overdose

Law Enforcement Task Force, Proviso Group, Sober Homes Task Force

The Law Enforcement Task Force, Proviso Group, and Sober Homes Task Force were created in response to a request by the Florida Legislature to the State Attorney for the 15th Judicial Court to form a Task Force to study the opioid crisis and recommend changes to Florida law and administrative rules. Meeting since July 2016 these groups have convened to identify strengths and challenges of existing criminal laws to deal with unscrupulous activity in the treatment and recovery industry and to make recommendations for positive change through legislation and regulatory enhancements. In January of 2017 the Palm Beach County Sober Homes Task Force released its report and recommended changes to existing laws and regulations. The following represents a summary of those changes and recommendations.

Law Enforcement Task Force, Proviso Group and Sober Homes Task Force Recommendations

1. Department of Children and Families
    a. The Department of Children and Families (DCF) should be given the necessary resources (including staff and authority) to license and monitor treatment providers and recovery residences, as well as investigate complaints.
    b. Chapter 397 should include provisions that would allow DCF flexibility to deny or delay the issuances of licenses where there are concerns with compliance.
    c. DCF should be given the authority to license commercial recovery residences that are engaged in commerce with treatment providers. Such licensing should encompass more than safety issues and should require that significant protocols be followed, similar to those utilized by the Agency for Health Care

Administration (AHCA) for the oversight of Adult Living Facilities (ALF) and Adult Family Care (AFC) licenses.

d. DCF should develop standards similar to the National Alliance of Recovery Residences (NARR) which must be met by applicants prior to issuing a license to the commercial recovery residence.
e. Marketing practices standards should be included in the requirements for all components of licenses. Such standards should address advertising, internal and external admissions and call centers, staff training, minimum qualifications and compensation, referrals, and compliance with the Florida Patient Brokering Act.
f. Create and nationally advertise a hotline for DCF to investigate complaints against treatment providers and commercial recovery residences in Florida. A separate investigative division should be established to monitor compliance as well as marketing abuses.
g. Increase funding to DCF to sufficiently process provider and component licenses. Provide adequate revenue-neutral funding through an increase in fees for non-public licensed providers and commercial recovery residences.

2. Patient Brokering
    a. Provide meaningful oversight and enforcement by DCF as well as mandatory credentialing (currently FARR) for any commercial recovery residence that is allowed to receive a subsidy, directly or indirectly, from a treatment provider in exchange for referrals to, or from, that provider, or otherwise contracts in any way with a provider.
    b. Adopt legislative changes to 397.407(11) requiring that a licensed service provider not be allowed to "refer a prospective, current, or discharged patient to, or accept a referral from" a recovery residence unless the recovery residence is certified and actively managed by a certified recovery residence administrator.
    c. Commercial recovery residences that contract with a service provider, directly or indirectly, need to be licensed and monitored by DCF and be required to maintain identifiable standards.
    d. Restrict the licensure category for Intensive Outpatient (IOP) or Day/Night treatment from providing free or subsidized housing to a patient beyond 90 days within one calendar year.
    e. Add the word "benefit" to the prohibited items solicited or received in return for patient referrals to the Patient Brokering Statute.
    f. Increase penalties for multiple brokering offenses as well as significant fines to deter misconduct.
    g. Adequately fund the commercial recovery residence credentialing entity through increased certification fees and fees for service.

3. Marketing
    a. Require marketers or admissions employees directing patients to specific treatment programs to have certain minimum education and/or certain qualifications. Such individuals should be prohibited from diagnosing and/or recommending specific levels of care without the appropriate license or certification.
    b. Require marketing entities referring patients to Florida to be registered agents in the State for service of process.
    c. The Legislature should enact §397.55 "Prohibition of Unethical Marketing Practices", an ethical marketing statute that would clarify standards in the industry.
    d. The Legislature should enact §817.0345 "Prohibition of Fraudulent Marketing Practices" to criminalize and deter the most serious marketing abuses involving fraudulent representations.

4. Attorney General Office of Statewide Prosecution: Jurisdiction
    a. The Legislature should amend §16.5 to include patient brokering as a specific offense, enabling the Attorney General to investigate and prosecute this crime.
    b. The Legislature should amend §895.02 to add patient brokering to the predicate offenses constituting "racketeering activity" enabling the Attorney General to investigate and prosecute criminal enterprises that commit these crimes in one or more circuits.

5. Impediments to Effective Prosecution: Recommendations
    a. Amend §397.501 "Rights of Individuals" to follow the criteria for the issuance of a preliminary court order by specifically adopting by reference the language found in 42C.F.R.§2.66(b).
    b. The Legislature should consider additional state funding for law enforcement training in the areas of patient brokering, marketing and healthcare fraud in the substance abuse treatment industry.

6. Standard of Care/Medical Necessity/Ancillary Services
    a. The Legislature should consider enhanced penalties based on significant dollar amount thresholds; over $100,000, $500,000, $1,000,000.
    b. The standard of care involved in substance abuse treatment is not easily defined or universally accepted. The Task Force will continue to study the issue and report any findings or recommendations to the Legislature.
    c. The need for ancillary services (transportation, benefits, employment, life skills) while involved in recovery will continue to be studied by the Task Force.

Document Review

This report represents findings based on a review of existing reports and plans that have been conducted to date.

a. Grand Jury Report

b. Palm Beach County Substance Awareness Coalition's Recovery Awareness Partnership

c. Delray Beach Drug Abuse Task Force

d. Local DEA efforts

e. HIDTA ODMAP initiative

f. SAMHSA funding

g. A Prescription for Action: Local Leadership in Ending the Opioid Crisis, A Joint Report from the National League of Cities (NLC) and the National Association of Counties (NACo), 2016.

h. Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States, K. Murphy, M. Becker, J. Locke, C. Kelleher, J. McLeod, & F. Isasi. National Governor's Association Center for Best Practices, Washington, D.C., July 2016.

i. The Prescription Opioid Epidemic: An Evidence-Based Approach. November 2015. Alexander, C.G., Frattaroli, S., Gielen, A.C., eds. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland: 2015

Local Initiatives

Grand Jury Report

A Palm Beach County Grand Jury was called for to investigate how government agencies are addressing the proliferation of fraud and abuse occurring within the addiction treatment industry. It was asked to make appropriate findings and recommendations on how these agencies can better perform their duties to ensure that communities remain safe and individuals with substance use disorders are protected. Through this assignment, the Grand Jury reviewed five major areas of concern in regulatory oversight and enforcement: (1) marketing; (2) commercial group housing designed for persons in recovery (also known as recovery residences, halfway houses, or sober homes); (3) the ability of the Department of Children and Families to take action; (4) the strength and clarity of the patient brokering statute; and (5) law enforcement's ability to take action. After hearing testimony from a wide range of sources, the Grand Jury found a compelling and urgent need for both increased oversight and enforcement in Florida's substance abuse treatment industry. The following represents a summary of the recommendations made by this Grand Jury:

- Prohibit deceptive advertising and punish with criminal sanctions.
- Require disclaimers that notify patients and families about material information.
- Require marketers and admissions personnel to be licensed.
- Require DCF license and FARR certification for commercial recovery residences, especially those that contract with treatment providers.
- Eliminate loopholes that allow for patient referrals to uncertified recovery residences owned by a treatment provider.
- Prohibit treatment providers from accepting patient referrals from uncertified recovery residences.
- Treat license as a privilege rather than a right.
- Require credentials such as a background check for owning a treatment center.
- Required certificate of need for new treatment providers.
- Provide adequate resources to DCF and FARR by raising fees.
- Amend §817.505, Fla. Stat. to prohibit the solicitation or receipt of any "benefit" in exchange for referrals or treatment.
- Increase criminal penalties and minimum fines for patient brokering.
- Enable the Office of Statewide Prosecution to prosecute patient brokering.
- Amend §397.501(7)(h), Fla. Stat.to allow disclosure for patient records without prior notification under the same circumstances as found in 42 C.F.R. §2.66(b).
- Educate local law enforcement on privacy laws and promote better inter-agency collaboration.

Palm Beach County Substance Awareness Coalition Recovery Awareness Partnership (RAP)

In addition to the above efforts to combat the opioid epidemic specifically, other entities exist in Palm Beach County that meet regularly to address the challenges of substance use and other co-occurring conditions more globally. These include the Palm Beach County Substance Awareness Coalition and the Delray Beach Drug Abuse Task Force. An email provided by the Palm Beach County Substance Awareness Coalition outlined the priorities of the Recovery Awareness Partnership.

1. Ethics and Standards
   - Establish an ethics board for peer accountability in the local treatment industry
2. Insurance and Parity
   - Work toward establishing lines of communication with the Florida Insurance Commission. Improve relationships with insurers so that Floridians may access addiction treatment services in Florida.
3. Family and Community Education
   - Educate family members and members of the larger community on how to find good treatment, how to avoid unethical providers and to support recovery in our families and communities
4. Public/Private Partnership
   - Increase treatment capacity for the uninsured and underinsured. Develop, "The Palm Beach 100", a network of quality providers willing to contract with public agencies to provide addiction treatment services.
5. Public Policy
   - Make connections with elected officials and keep that group informed of legislation affecting the treatment industry and the recovery community. Build bridges between our group and state, municipal and county officials.

Local DEA efforts

In January 2017, the DEA's West Palm Beach District Office launched a Palm Beach county-wide heroin initiative. The initiative is a multi-jurisdictional endeavor in which its success is dependent upon close collaboration with state and local police departments as they traditionally serve as first responders to the numerous opiate overdose scenes in the county. The ultimate goal of the initiative is to drastically decrease the availability of opiates in Palm Beach County which in effect would reduce the alarming number of overdoses. DEA will attempt to accomplish this by:

- Identifying retail and mid-level drug traffickers that knowingly distribute heroin/fentanyl and other related opiates to an individual that result in their death.
- Provide ongoing assistance to state and local departments in Palm Beach County by providing information that may lead to the arrest and conviction of these groups.
- Dismantle and disrupt Drug Trafficking Organizations at the highest level that are directly responsible for importing/smuggling large quantities of heroin/fentanyl into Palm Beach County.

Bureau of Justice Assistance, U.S. Department of Justice

On January 17, 2017 the Washington/Baltimore High Intensity Drug Trafficking Area Program (HIDTA) launched its real-time overdose surveillance system-ODMAP. This will enable first responders -police, fire, and EMS personnel to report known or suspected overdose events using a Smartphone application. Within 15 seconds after an overdose event is reported, the event is mapped and monitored. Filters allow viewers to sort events by date, time and location to identify overdose spikes. Public health agencies can use this real-time information to develop strategies designed to stop the use of dangerous drugs such as heroin, fentanyl and fentanyl analogues. Future plans include collaborating with the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Centers for Disease Control and Prevention (CDC) to offer lifesaving information services for caregivers and treatment sites. ODMAP is provided free of charge.

Substance Abuse and Mental Health Services Administration

The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) issued a Funding Opportunity Announcement (FOA) entitled "State Targeted Response to the Opioid Crisis" in late 2016. Applications for this funding announcement must be submitted by the State Department of Children and Families by February 17, 2017. The local Managing Entity, Southeast Florida Behavioral Health Network (SEFBHN) submitted data and information relative to the opioid crisis in Palm Beach County, requesting funding through this application. Funding will support the development of a statewide comprehensive needs assessment as well as a comprehensive strategic plan to address the gaps in prevention, treatment and recovery identified in the needs assessment.

National Reports

A Prescription for Action: Local Leadership in Ending the Opioid Crisis, A Joint Report from the National League of Cities (NLC) and the National Association of Counties (NACo), 2016.

In early 2016, the National League of Cities and the National Association of Counties convened a joint task force to identify the local policies and practices that reduce opioid abuse and related fatalities. The task force developed recommendations aimed at city and county officials that were divided into four sections: (1) leadership; (2) education; (3) treatment; and (4) public safety and law enforcement. The following provides the highlights of those recommendations.

Leadership:

- Set the tone in the local conversation on opioids. Leaders must set the tone in conversations about opioids by breaking the silence, chipping away at stigma, and normalizing conversations about addiction and its treatment.
- Convene community leaders. City and county leaders should form or join local task forces of leaders from various sectors of local government and across the community to assess the causes and impacts of opioid abuse and the solutions needed to decrease rates of abuse.
- Foster regional cooperation. It is vital to establish or strengthen lines of communication with neighboring governments. Solutions are more effective when coordinated among the various governments within a region.
- Educate and advocate to state and federal partners. City and county officials should educate their state and federal counterparts on the effects of the opioid crisis on local communities and advocate for actions from those levels of governments that can help reverse trends of opioid misuse.
- Ensure progress for all in formulating responses to addiction. Give ongoing attention and action to the racial disparities relevant to addiction and to its treatment. Continue programs of research, information sharing, educational programming, advocacy and technical assistance in the fields of addiction and addiction treatment.

Prevention and Education:

- Increase public awareness by all available means. Use a variety of platforms to communicate with constituents and increase public awareness about the dangers of opioids. Actively seek opportunities to communicate with constituents, especially those who may be at greater risk of opioid abuse and addiction.
- Reach children early, in and outside of school. Out-of-school recreation programs provide valuable opportunities to engage children and youth. Local elected officials should call on each parent in the community to speak regularly with their children about the dangers of prescription and illicit opioids.
- Advocate for opioid training in higher education. Students in health-related undergraduate and graduate programs, in addition to those in medical, pharmacy, nursing, and dental schools, should receive appropriate training on pain management and substance use disorders. City and county leaders should assess the extent to

which this training is provided in educational institutions within their jurisdiction and use their positions as elected leaders to advocate for greater training where needed.

- Embrace the power of data and technology. Data related to overdoses and deaths can help local leaders focus public awareness efforts on neighborhoods facing greater rates of opioid-related harm. Assess where data is being collected and to what extent it is being shared between different departments and organizations. Medical Examiners should list with specificity the drugs that caused opioid-related deaths so public health and law enforcement officials can adjust their response accordingly. Mapping technology can provide information to individuals about resources such as safe disposal locations, pharmacies that dispense naloxone and facilities that offer treatment services.
- Facilitate safe disposal sites and take-back days. Ensure that there are a sufficient number of accessible, safe disposal sites within the jurisdiction so members of the community can dispose of unneeded opioids. Host periodic drug take-back days so community members can dispose of unneeded opioids at a convenient location while also creating public awareness about the dangers of prescription drugs.

Expanding Treatment:

- Make Naloxone widely available. Leaders should work to ensure that Naloxone is made widely available in the community and provided to all city and county first responders. The administration of naloxone should be followed by medical holds, referrals, or "warm handoffs" to counseling and treatment services that help individuals address the underlying drug abuse that led to their overdose.
- Intervene to advance disease control by implementing a clean syringe program. Establish places or programs to deposit used syringes and needles to help with disposal and to open a path for individuals seeking substance use treatment.
- Increase availability of medication-assisted treatment. A regimen of long-term (six months or more) of medication exchange, psychological counseling, peer-to-peer support networks and close patient monitoring is the evidence-based model to address addiction and co-occurring mental health problems. Sophisticated mediation-assisted treatment requires highly trained practitioners and access to often costly medication. Increase the cooperation between city and county governments to enhance the number of beds for long-term medication-assisted treatment to overcome the health crisis.
- Expand insurance coverage of addiction treatments. Advocate for including addiction treatments in all insurance plans and remove limits on such treatments. Work to ensure that the health plans of local government employees cover addiction treatments.
- Employ telemedicine solutions. This technology is useful in serving rural populations, where distance between first responders and patients is often a critical factor. Establish telemedicine networks to provide treatment for medical conditions, including mental health and drug addiction treatment.

Reassessing Public Safety and Law Enforcement approaches:

- Reduce the illicit supply of opioids. Facilitate partnerships between local law enforcement and the state and federal counterparts to identify the flow of illicit drugs into communities. Work closely with the DEA's State and Local Task Force Program.
- Consider alternatives to arrest. Empower local law enforcement officials to use alternatives to arrest for individuals who commit low-level crimes associated with drug abuse and often co-occurring mental health issues. Local law enforcement officers should be able to refer addicts to local, community-based drug treatment programs. Local law enforcement officials should be trained on resources that are available for drug treatment programs and how individuals who need treatment can access these programs.
- Divert from the criminal justice system. Advocate for diversion from incarceration for nonviolent individuals whose low-level criminal behavior stems from their drug addiction. Utilize Drug Courts to reduce drug use relapse and criminal recidivism through risk and needs assessment, judicial interaction, monitoring and supervision, graduated sanctions and incentives, treatment and various rehabilitation services. On average, drug courts save an estimated $5,680 to $6,208 per offender. Diversion courts can have a particularly positive impact on our nation's veterans. Veteran's treatment courts offer an opportunity for those suffering with substance abuse or mental health issues to receive assistance in accessing their earned benefits, obtaining targeted treatment and connecting with a peer mentor who understands their challenges and pain.
- Facilitate treatment in jails. Work to ensure that inmates in local jails who struggle with addiction receive proper treatment for their illness, including medication-assisted treatments, with a special focus on pre-release treatment and service coordination. Jails can implement low-cost treatment programs to provide individuals with the treatment they need. Treatment programs in jails have consistently been shown to reduce the costs associated with lost productivity, crime and incarceration caused by heroin use.
- Support "Ban the Box" initiatives. Change hiring practices to prohibit questions regarding past criminal history on applications for local government jobs and hiring by vendors under government contract. The inability to find a job or a place to live leads many to return to previous criminal activities and remain in the grip of opioid abuse and associated criminal behavior. "Ban the Box" prevents prospective employers from asking about criminal background history during the early stages of the application process. The goal of the initiative is to ensure employers first consider the job candidate's qualifications without the stigma of a criminal record.

State Recommendations:

- Establish or strengthen prescription drug monitoring programs (PDMPs). States should require medical professionals to use PDMPs to assess potential abuse or diversion before prescribing opioids, and they should require those who dispense opioids to report each prescription to the PDMP within 24 hours.

- Institute guidelines for prescribing opioids. States should adopt the CDC guidelines to help practitioners determine when to initiate opioids for chronic pain, how to select opioids, set their dosage, duration and discontinuation and how to assess risk and address the harms of opioid use.
- Support greater availability of medication-assisted treatments. States should assess the factors that limit medication-assisted treatments in their cities and counties and take actions to help increase the availability of such treatments. Barriers to medication-assisted treatments should be assessed and training of primary care physicians in administering medication-assisted treatments should be required or incentivized.
- Structure Medicaid programs to promote safe opioid prescription practices and access to treatments. Medicaid participants are twice as likely to be prescribed opioids and have six times the risk of opioid-related overdose deaths. States should address these disparities through their Medicaid plans by limiting opioid prescriptions, promoting the use of non-opioid pain management methods and optimizing timely access to medication-assisted treatments.
- Explicitly authorize or remove barriers to clean syringe programs. Clean syringe exchange programs protect communities from outbreaks of infectious diseases such as HIV and hepatitis. They also provide important opportunities to connect individuals struggling with drug addiction to treatment services. States should support these programs and remove statutory barriers to their establishment in cities and counties.

Federal Recommendations:

- Expand access to medication assisted treatments. The federal government should continue to make changes to allow other medical professionals (such as nurse practitioners) to dispense buprenorphine.
- Provide funding for local efforts to address the opioid crisis. The federal government should quickly pass legislation to provide emergency supplemental funding to assist local governments through grants that would help expand and improve existing efforts to address the opioid epidemic in local communities across the nation.
- Partner with local and state officials to reduce the supply of fentanyl and carfentanil. The federal government should devote extensive resources to federal, state, and local law enforcement efforts to stop the illicit trafficking of fentanyl and carfentanil.
- Allow individuals in custody to continue receiving Medicaid benefits until convicted, sentenced and incarcerated and require states to suspend, rather than terminate, Medicaid for individuals in jail. The federal government should provide greater flexibility in the Medicaid program for justice-involved populations and should require states to suspend, rather than terminate, coverage for incarcerated individuals.

Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States, K. Murphy, M. Becker, J. Locke, C. Kelleher, J. McLeod, and F. Isasi. National Governor's Association Center for Best Practices, Washington, D.C., July 2016.

This road map was developed to help states respond to the growing crisis of opioid misuse and overdose. It was created through extensive research and consultation with senior state officials and other national experts in the fields of health and public safety. The National Governors Association (NGA) invited input from a broad array of stakeholders, including pain specialists, substance use disorder treatment providers, health care payers, law enforcement, and criminal justice professionals. Numerous federal agencies shared resources and expertise. The following represents the highlights of the road map.

Identify Policy and Financial Levers, and Conduct High-Level Data Scan

- Take initial inventory of existing efforts, financial mechanisms, and high-level data to improve understanding of the problem and identify opportunities
  - Identify staff to conduct initial review of:
    - Existing prescription opioid and heroin plans
    - Medicaid and other contracting authorities
    - Payment policies
    - Financing mechanisms, including federal funding for health care and public safety
    - High-level, publicly available state and local data, including health and public safety data

Identify or Create Prescription Opioid and Heroin Task Force

- Designate a team that owns development and execution of a strategic plan
  - Compose or work with an existing Opioid Team with direct report to high-level officials
  - Consider a team comprised of state officials and local academic experts to work in consultation with stakeholders
  - Identify a team lead (or co-leads) who is engaged with public health and safety, and who has:
    - Visibility overall health and law enforcement efforts
    - Ability to elevate key issues to ultimate decision makers

Ensure Key Decision Makers are Involved

- Opioid Team identifies key decision makers to review and validate levers and provide preliminary high-level priorities for addressing the epidemic
  - Identify and engage key decision makers to familiarize them with the problem and understand their high-level priorities
  - Key decision makers may include:
    - "Drug czar"
    - Behavioral health leads
    - Medicaid director
    - Local health officials

- Corrections officials
- State Attorney
- Public Safety officials
- Social services officials
- Sheriffs/police chiefs

Connect with Priority Stakeholders and Set Vision

- Opioid Team meets with priority stakeholders to assess the problem, identify potential challenges and establish vision.
  - Meet with priority stakeholders and trusted experts to:
    - Identify health care and public safety priorities
    - Interpret data and review evidence base
    - Identify major county-specific challenges and opportunities related to political environment, cultural competency, etc.
    - Develop a vision statement to guide priority setting within time horizons (1 year, 5-10 years, etc.)

Establish a Policy Framework

- Create an Overarching Prescription Opioid Misuse and Heroin Policy Framework
  - Develop health care strategies for prevention and early identification
  - Develop public safety strategies for reducing illicit supply and demand
  - Develop health care strategies for treatment and recovery
  - Develop public safety strategies for response to misuse and overdose

- Analyze Policy Strategies and Identify Policy Priorities
  - Health Care Strategies for Prevention and Early Identification
    - Develop and update guidelines for all opioid prescribers
    - Limit new opioid prescriptions for acute pain, with exceptions for certain patients
    - Develop and adopt a comprehensive opioid management program in Medicaid and other publicly funded programs
    - Remove methadone for managing pain from Medicaid preferred drug lists
    - Expand access to non-opioid therapies for pain management
    - Enhance education and training for all opioid prescribers
    - Maximize the use and effectiveness of PDMPs
    - Use public health and law enforcement data to monitor trends and strengthen prevention efforts
    - Enact legislation that increases oversight of pain management clinics to reduce "pill mills"
    - Raise public awareness about the dangers of prescription opioids and heroin

- Public Safety Strategies for Reducing the Illicit Supply and Demand for Opioids

- Establish a collaborative information sharing environment that breaks down silos across state agencies to better understand trends, target interventions and support a comprehensive community-based response
- Leverage assets from partner entities to improve data collection and intelligence sharing to restrict the supply of illicit opioids
- Expand statutory tools for prosecuting major distributors
- Expand law enforcement partnerships and data access to better target over-prescribers
- In narcotics investigations, implement best practices and ensure intergovernmental cooperation
- Establish and enhance stakeholder coalitions

- Health Care Strategies for Treatment and Recovery
  - Change payment policies to expand access to evidence-based MAT and recovery services
  - Increase access to naloxone
  - Expand and strengthen the workforce and infrastructure for providing evidence-based MAT and recovery services
  - Create new linkages to evidence-based MAT and recovery services
  - Consider authorizing and providing support to syringe service programs
  - Reduce stigma by changing the public's understanding of substance use disorder

- Public Safety Strategies for Responding to the Opioid Crisis
  - Empower, educate and equip law enforcement personnel to prevent overdose deaths and facilitate access to treatment
  - Reinforce use of best practices in drug treatment courts
  - Ensure access to MAT in correctional facilities and upon re-entry into the community
  - Strengthen pre-trial drug diversion programs to offer individuals the opportunity to enter into substance use treatment (LEAD: Law Enforcement Assisted Diversion)
  - Ensure compliance with Good Samaritan laws

- Finalize Policies, Implement and Evaluate
  - Develop Work Plan Based on Policy Priorities
    - Develop a Work Plan or identify an existing vehicle, such as an existing statewide opioid plan, from which an actionable work plan can be developed to achieve defined objectives. The plan should include:
    - Specific evidence-based or promising health care and public safety strategies that will be pursued to achieve desired outcomes in the short and long term
    - Agreed upon metrics for assessing the effect of the selected strategies
    - Solutions to address critical resource gaps, such as workforce, data and evaluation

- An ongoing process for maintaining internal cross-agency collaboration and external stakeholder engagement
- A communications plan with deliverables, target audiences, key messaging and measurable outcomes
- Clear action steps that drive toward stated objectives

- Continuously monitor and evaluate
  - Implement rapid cycle performance monitoring, reporting, and quality improvement strategies
    - Meet regularly to report on activities and ensure alignment
    - Connect monitoring, reporting, and quality improvement strategies to the existing framework, such as dashboards, assessments or other reporting requirements
    - Assess progress toward goals and monitor for potential unintended consequences
  - Make programmatic adjustments based on evaluation

The Prescription Opioid Epidemic: An Evidence-Based Approach. November 2015. Alexander, C.G., Frattaroli, S., Gielen, A.C., eds. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland: 2015

This report provides a comprehensive overview of seven target points of opportunity, summarizes the evidence about the intervention strategies for each, and offers recommendations for advancing the field through policy and practice. The seven points are: (1) prescribing guidelines; (2) prescription drug monitoring program; (3) pharmacy benefit managers and pharmacies; (4) engineering strategies; (5) overdose education and naloxone distribution programs; (6) addiction treatment; and (7) community-based prevention. The following provides a highlighted overview with more detail to follow in the final report.

Prescribing Guidelines

- Repeal existing guidelines and lax prescription laws and rules
- Require oversight of pain treatment
- Provide physician training in pain management and opioid prescribing and establish a residency in pain medicine for medical school graduates

Prescription Drug Monitoring Program (PDMPs)

- Mandate prescriber PDMP use
- Proactively use PDMP data for law enforcement and education purposes
- Authorize third-party payers to access PDMP data with proper protections
- Empower licensing boards for health professions and law enforcement to investigate high-risk prescribers and dispensers

Pharmacy Benefit Managers (PBMs) and Pharmacies

- Inform and support evaluation research
- Engage in consensus process to identify evidence-based criteria for using PBM and pharmacy claims data to identify people at high risk for abuse and in need of treatment
- Improve management and oversight of individuals who use controlled substances
- Support restricted recipient (lock-in) programs
- Support take-back programs
- Improve monitoring of pharmacies, prescribers and beneficiaries
- Incentivize electronic prescribing

Overdose education and Naloxone distribution programs

- Engage with the scientific community to assess the research needs related to naloxone distribution evaluations and identify high-priority future directions for naloxone-related research
- Partner with product developers to design naloxone formulations that are easier to use by nonmedical personnel and less costly to deliver
- Work with insurers and other third-party payers to ensure coverage of naloxone products
- Partner with community-based overdose education and naloxone distribution programs to identify stable funding sources to ensure program stability
- Engage with the healthcare professional community to advance consensus guidelines on the co-prescription of naloxone with prescription opioids

Addiction Treatment

- Invest in surveillance of opioid addiction
- Expand access to buprenorphine treatment
- Require federally-funded treatment programs to allow patients access to buprenorphine or methadone
- Provide treatment funding for communities with high rates of opioid addiction and limited access to treatment
- Develop and disseminate a public education campaign about the important role for treatment in addressing opioid addiction
- Educate prescribers and pharmacists about how to prevent, identify and treat opioid addiction
- Support treatment-related research

Community-based prevention strategies

- Invest in surveillance to ascertain how patients in treatment for opioid abuse and those who have overdosed obtain their supply
- Convene a stakeholder meeting with broad representation to create guidance that will help communities undertake comprehensive approaches that address the supply of, and demand for, prescription opioids in their locales; implement and evaluate demonstration projects that model these approaches

- Convene an inter-agency task force to ensure that current and future national public education campaigns about prescription opioids are informed by the available evidence and that best practices are shared
- Provide clear and consistent guidance on safe storage of prescription drugs
- Develop clear and consistent guidance on safe disposal of prescription drugs; expand access to take-back programs
- Require that federal support for prescription misuse, abuse and overdose interventions include outcome data

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Root Cause Analysis

Following review of the data, evaluation of local and national reports and recommendations, and meetings with key stakeholders, the Ronik-Radlauer Group conducted a root cause analysis focusing on the local epidemic, with causes, challenges associated with those causes and recommendations to address those root causes. After synthesizing this information, a Strategic Plan was developed to provide a blueprint and road map for the path forward. The following provides an overview of the root causes:

- The opioid epidemic is complex and requires a coordinated community response
- There is an urgent need to rebuild publicly supported substance abuse crisis response and treatment services capacity lost due to the closure of the SAAP/Drug Farm and CARP when 60% of the county's indigent capacity was eliminated
- Individuals addicted and in recovery are in need of access to prevention, early intervention, and evidence-based treatment and services
- First Responders are often on the frontline of the epidemic
- The Medical Examiner's Office is overwhelmed with the increase in number of cases
- There is a need for legislative advocacy to impact local, state, and federal rules and laws
- Sober Homes are unregulated and may be involved in unscrupulous business practices
- Law Enforcement and the Criminal Justice system have been challenged to respond to the epidemic
- There is an increased likelihood for co-morbid physical challenges such as HIV and HepC as well as psychiatric illnesses and trauma-related issues
- The Prescription Drug Monitoring Program (PDMP) is not being implemented completely
- The insurance industry may be a contributing factor to the opioid epidemic

Causal Factor	Root Cause Challenges	Recommendations
The opioid epidemic is complex and requires a coordinated community response	*The community needs to be aware of the size and scope of the opioid epidemic. The challenge is ever-changing so staying abreast of current trends is necessary *Any successful intervention needs to address the cultural needs of the community in which it serves *There needs to be coordinated access to treatment so that consumers and family members know where to go to get the help that they need *Currently there are multiple Opioid efforts occurring in the County. There is a need to create a coordinated effort to address the complexity of this issue. Continued coordination of these initiatives is required to continue to address the epidemic *There needs to be Leadership to coordinate the County-wide effort including the development of a Steering Committee and a comprehensive strategic plan *More data is needed to ensure that the needs of the community are being met. Create Data Development agendas to identify what data is needed *There are multiple funding opportunities for state and federal grants. A coordinated effort is required to be successful. There needs to be leadership within the community to ensure that there is collaboration and not competition.	*Develop educational plan to engage all sectors, including the most up-to-date information on the danger of new poisonous analogs and trends *Identify needs specific to communities of color and develop plan to address those needs *Identify needs specific to linguistically and geographically isolated populations and develop plan to address those needs, including telemedicine solutions *Create community resource directory of vetted treatment providers *Create the "Palm Beach 100," a network of quality, vetted providers who are willing to contract with public organizations to provide addiction treatment services *Create a Coordinator position and support positions within Palm Beach County government to provide leadership and guidance *Work with existing Heroin Task Force, Sober Homes Task Force, Recovery Action Partnership and other community-based groups to integrate efforts *Create a process for communication and collaboration across County government departments. *Create a Steering Committee/Leadership Coalition of leaders with decision-making authority to support implementation of the strategic plan. *Identify and engage key decision makers to familiarize them with the problem and understand their high-level priorities *Through the use and understanding of data and evidence base identify major county-specific challenges and opportunities *Develop a vision statement to guide priority setting within time frames *Identify and coordinate funding opportunities as well as public/private partnerships to support the strategies and activities of the strategic plan. *Convene a regional coordinating coalition of stakeholders in counties to the north and south to integrate efforts *Establish a collaborative information sharing environment that breaks down silos across agencies to better understand trends and target interventions.

Causal Factor	Root Cause Challenges	Recommendations
There is an urgent need to rebuild publicly supported substance abuse crisis response and treatment services capacity due to the closure of the SAAP/ Drug Farm and CARP.	*Medication Assisted Treatment needs to be implemented and expanded in Palm Beach County *There are not enough residential substance abuse treatment services available *There are not enough Detox beds in Palm Beach County * Develop plan to require DCF license and FARR certification for commercial recovery residences, especially those that contract with treatment providers	*Scale and replicate Suboxone Pilot Project throughout County based on outcomes *Increase access to naloxone through pharmacies and law enforcement. *Increase funding to expand publicly funded treatment facilities and services including Residential Level 2 and 4 beds. *Increase funding to expand publicly funded capacity for non-secure Detox beds (Residential Level 1) *Increase funding to create a publicly funded secure Detox or Addictions Receiving Facility for youth and adults * Increase bed capacity through scholarship beds at for-profit providers to help divert individuals into treatment immediately following discharge from hospital or jail *Provide funding for access to peer support specialists and case managers or navigators to support individuals who are preparing for discharge from hospital or jail.

Causal Factor	Root Cause Challenges	Recommendations
Individuals addicted and in recovery are in need of access to prevention, early intervention, and evidence-based treatment and services	*In order to slow the growth of the Opioid epidemic there needs to be a concerted effort towards prevention services *In order to slow the growth of the Opioid epidemic upcoming healthcare professionals need to be taught appropriate prescribing practices *Early screening, identification and intervention of substance use behavior decreases the chance of later more serious drug use *Traditional behavioral health services do not meet the needs of all substance users. There is evidence that 18-25 year-olds have access to treatment but do not utilize traditional treatment services *Once a person is in recovery they need additional supports to be successful including housing, job support transportation, etc.	*Develop an evidence-based curriculum to reach children and youth early, inside and out of school *Advocate for opioid training in schools of higher education, including prescribing practices and compliance with current CDC prescribing guidelines *Develop plan to provide training in evidence-based assessment screening tools for school-based nurses *Provide support to the Suboxone Pilot Project through the use of peer support specialists and case managers or navigators. *Develop plan to train educators about the signs and symptoms of substance use, mental illness, and trauma *Develop plan to engage and support 18-25 year-olds in treatment through peer support rather than traditional treatment strategies *Develop plan to increase access to housing, including emergency shelters, supportive housing, and permanent housing *Develop plan to increase access to childcare, transportation, and employment for individuals in recovery

Causal Factor	Root Cause Challenges	Recommendations
First Responders are often on the frontline of the epidemic	*First Responders are trained in health related trauma but do not have knowledge of behavioral health conditions including mental health and substance use *First Responders are being exposed to repeated trauma of seeing overdose and death which takes a toll on their stress level	*Develop plan to provide training in substance use, mental illness and trauma to emergency room staff, healthcare professionals, and pharmacists *Develop plan to provide training in substance use, mental illness and trauma to first responders *Develop a plan to support First Responders as the frontline response to the opioid epidemic

Causal Factor	Root Cause Challenges	Recommendations
The Medical Examiner's Office is overwhelmed with the increase in number of cases	*There has been an increase of deaths related to Opioid overdoses *Information regarding psychological autopsies will take addition support but will assist in the collection of data	*Provide financial support to the Medical Examiner to hire an additional Examiner and technician. *Develop a plan to integrate data management, reporting and analysis across all reporting organizations (hospitals, Fire Rescue, Law Enforcement, Medical Examiner, treatment providers, Department of Health, etc.)

Causal Factor	Root Cause Challenges	Recommendations
There is a need for legislative advocacy to impact local, state, and federal rules and laws	*There are many issues that need to be addressed through policy and advocacy including: • Sober homes • Patient brokering • Marketing and healthcare fraud • Regulating the treatment industry *The State Attorney's office has identified multiple initiatives to be addressed through various task force committees	*Develop a plan to advocate and lobby the Legislature for additional funding for law enforcement training in the areas of patient brokering, marketing and healthcare fraud in the substance abuse treatment industry * Work with existing Heroin Task Force, Sober Homes Task Force, Recovery Action Partnership and other community-based groups to integrate efforts *Develop a plan to work with elected officials to inform them of legislation and other activities affecting the substance abuse treatment industry and the recovery community

Causal Factor	Root Cause Challenges	Recommendations
Sober Homes are unregulated and may be involved in unscrupulous business practices	*Sober homes are unregulated *Some sober homes are not working to the benefit of the clients *Some sober homes are only referring to treatment centers that pay them for referrals *Some sober homes are involved in unscrupulous marketing practices *There is a lack of affordable housing that causes people going through treatment to rely on these sober homes * Develop recommendations to ensure necessary resources (including staff and authority) are available to DCF to support the licensing and monitoring of treatment providers and recovery residences, as well as investigate complaints	*Advocate for changes to Chapter 397 and DCF responsibilities to license and monitor treatment facilities and sober homes adequately and effectively. (per Sober Homes Task Force recommendations and Grand Jury Report) *Promote adoption of amendment of §817.505, Florida Statute, to prohibit the solicitation or receipt of any "benefit" in exchange for referrals or treatment *Develop plan to advocate for recommendations made by the Sober Homes Task Force under "Marketing" and the Grand Jury Report recommendations

Causal Factor	Root Cause Challenges	Recommendations
Law Enforcement and the Criminal Justice system have been challenged to respond to the epidemic	*Law Enforcement need to have treatment and diversion alternatives to arrest *Law Enforcement need to be able to assist individuals in accessing treatment as well as ensure safety of the community and the individual *Law Enforcement needs to be able to share information to connect individuals to support and treatment *People that are addicted to drugs tend to be involved in illegal activities to support their habits *Correctional facilities typically do not provide substance abuse treatment services *The Palm Beach County Drug Court Program does not have a dedicated treatment program though there is access to a referral network *There is a waiting list for residential treatment beds for individuals in Drug Court and who are waiting for those beds in-custody	*Identify potential pre-arrest diversion options (similar to LEAD-Law Enforcement Assisted Diversion) for appropriate cases *Evaluate and scale based upon results *Support the Palm Beach County Reentry's Program's Ban the Box initiative to add more cities and private sector businesses * Implement and evaluate the Designer Drug Enforcement Act *Evaluate the use and effectiveness of the Marchman Act *Educate local law enforcement on privacy laws and promote better interagency collaboration *Develop plan to ensure access to Medication Assisted Treatment (MAT) in correctional facilities and upon re-entry into the community *Develop plan to reinforce the use of evidence-based practices in drug treatment courts *Provide support to drug treatment courts to facilitate real-time access to treatment services *Increase funding to support specialized urinalysis for Drug Court participants *Enhance in-custody treatment provision and evaluate effectiveness of programs *Ensure access to peer support specialists and case managers or navigators to support individuals who are preparing for discharge from hospital or jail

Causal Factor	Root Cause Challenges	Recommendations
There is an increased likelihood for co-morbid physical challenges such as HIV and HepC as well as psychiatric illnesses and trauma-related issues	*There are state and local laws prohibiting the distribution of new syringes and collection of used syringes *Intravenous drug users often re-use and share syringes placing them at risk for HIV and Hepatitis C among other diseases	*Create plan to intervene to advance disease control by implementing a clean syringe program. *Collaborate with University of Miami to determine expansion feasibility into Palm Beach County. *Identify and seek private funding to support syringe exchange program. *Provide education on safe syringe usage. *Promote and educate regarding syringe exchange programs

Causal Factor	Root Cause Challenges	Recommendations
The Prescription Drug Monitoring Program is not being implemented completely	*While prescription Opioid use has decreased from previous years it is still a lead contributor to overdose deaths	*Develop plan to increase use of Prescription Drug Monitoring Program *Establish plan to ensure adherence to prescribing guidelines *Develop plan to proactively use PDMP data for law enforcement and education purposes *Provide training and education to the community on safe storage and safe disposal of prescription drugs as well as take back programs. *Develop plan to work with State licensing boards for health professions and law enforcement to investigate high-risk prescribers and dispensers

Causal Factor	Root Cause Challenges	Recommendations
The insurance industry may be a contributing factor to the opioid epidemic	*Insurance industry pays excessively for some services and not enough for others *Insurance industry pays for out of network services while under-reimbursing for in-state clients *Prescription Opioids continue to be the gateway drug to illegal Opioid use	*Develop plan to establish communication with insurance providers through the Florida Insurance Commission *Mandate prescriber Prescription Drug Monitoring Program (PDMP) and proactively use data for law enforcement and insurance education purposes *Authorize third party payers to access PDMP data with proper precautions *Develop guidelines about how to avoid unethical providers, how to navigate the insurance industry and how to support recovery in our families and communities *Develop plan to structure Medicaid programs to promote safe opioid prescription practices and access to treatments

Palm Beach County Opioid Initiative Strategic Plan

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Leadership				
Strategy 1	***Activity/Intervention***	***Person/Entity(s) Responsible***	***Timeframe***	***Resources Needed***
Establish a mechanism for oversight of the Opioid Initiative in Palm Beach County	1. Create a Coordinator position and support positions within Palm Beach County government to provide leadership and guidance.	Palm Beach County Government		
	2. Work with existing Heroin Task Force, Sober Homes Task Force, Recovery Action Partnership and other community-based groups to integrate efforts.	All Stakeholders		
	3. Create a process for communication and collaboration across County government departments.	Palm Beach County Government		
	4. Create a Steering Committee or Leadership Coalition of community leaders with decision-making authority to support the implementation of the strategic plan.	Palm Beach County Government		
	▪ Identify and engage key decision makers to familiarize them with the problem and understand their high-level priorities	All Stakeholders		
	▪ Identify health care and public safety priorities	All Stakeholders		
	▪ Through the use and understanding of data and evidence base identify major county-specific challenges and opportunities	All Stakeholders		
	▪ Develop a vision statement to guide priority setting within time frames	All Stakeholders		
	5. Develop a plan to work with elected officials to inform them of legislation and other activities affecting the substance abuse treatment industry and the recovery community.	All Stakeholders		
	6. Work with the Governor's Office, the Florida Department and the Florida Department of	Department of Health-Palm Beach County		

	Health-Palm Beach County as well as legislators to elevate the opioid epidemic to a public health crisis. 7. Identify and coordinate funding opportunities as well as public/private partnerships to support the strategies and activities of the strategic plan.	Palm Beach County Government		
Strategy 2 Increase capacity to evaluate and report the extent of the epidemic to inform the systems within the community regarding emerging or contributing trends.	***Activity/Intervention*** 1. Provide financial support to the Medical Examiner to hire an additional Examiner and technician. 2. Develop a plan to integrate data management, reporting and analysis across all reporting organizations (hospitals, Fire Rescue, Law Enforcement, Medical Examiner, treatment providers, Department of Health, etc.)	Palm Beach County Government Opioid Steering Committee		
Strategy 3 Foster regional cooperation to address the epidemic	1. Convene a regional coordinating coalition of stakeholders in counties to the north and south to integrate efforts.	Palm Beach County Government		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Prevention and Education				
Strategy 1 Create opportunities for community engagement	***Activity/Intervention*** 1. Develop social marketing and media strategy plan. 2. Develop educational plan to engage all sectors of the community, including the most up-to-date information on the danger of new poisonous analogs and trends.	***Person/Entity(s) Responsible*** Sober Homes Task Force Southeast Florida Behavioral Health Network	***Timeframe***	***Resources Needed***
Strategy 2 Develop and expand opportunities for school-based prevention and education efforts	***Activity/Intervention*** 1. Develop and implement a Strategic Prevention Framework that is evidence-based to educate all sectors. 2. Develop an evidence-based curriculum to reach children and youth early, inside and out of school. 3. Advocate for opioid training in schools of higher education, including prescribing practices and compliance with current CDC prescribing guidelines. 4. Develop plan to provide training in evidence-based assessment screening tools for school-based nurses. 5. Develop plan to train educators about the signs and symptoms of substance use, mental illness, and trauma.	Southeast Florida Behavioral Health Network Southeast Florida Behavioral Health Network Florida Atlantic University Health Care District School Board of Palm Beach County Southeast Florida Behavioral Health Network		
Strategy 3 Develop opportunities to educate emergency personnel, healthcare professionals, and pharmacists.	***Activity/Intervention*** 1. Develop plan to provide training in substance use, mental illness and trauma to emergency room staff, healthcare professionals, and pharmacists. 2. Develop plan to provide training in substance use, mental illness and trauma to first responders.	Southeast Florida Behavioral Health Network Palm Beach County Fire Rescue		

Strategy 4 Expand community awareness of law enforcement, prevention strategies and treatment options	***Activity/Intervention*** 1. Develop plan to provide education and public awareness about the Good Samaritan Law. 2. Develop a plan to support cross-sector training on naloxone usage. 3. Provide training and education to the community on safe storage and safe disposal of prescription drugs as well as take back programs.	Palm Beach Sheriff's Office Rebel Recovery Department of Health-Palm Beach County		
Strategy 5 Develop opportunities to educate family members and community-at-large	***Activity/Intervention*** 1. Create community resource directory of vetted treatment providers. 2. Develop guidelines about how to avoid unethical providers, how to navigate the insurance industry and how to support recovery in our families and communities.	211 RAP		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Treatment				
Strategy 1 Increase availability of medication-assisted treatment	***Activity/Intervention*** 1. Support the implementation of the Suboxone Pilot Project. ▪ Provide support to the Suboxone Pilot Project through the use of peer support specialists and case managers or navigators. ▪ Partner with community-based overdose education and naloxone distribution programs to identify stable funding sources to ensure program stability. ▪ Engage with the healthcare professional community to advance consensus guidelines on the co-prescription of naloxone with prescription opioids 2. Scale and replicate Suboxone Pilot Project throughout County based on outcomes. 3. Increase access to naloxone through pharmacies and law enforcement.	***Person/Entity(s) Responsible*** Palm Beach County Fire Rescue Health Care District Southeast Florida Behavioral Health Network Heroin Task Force Heroin Task Force Pilot Project Partners Heroin Task Force	***Timeframe***	***Resources Needed***
Strategy 2 Increase capacity of substance abuse treatment services	***Activity/Intervention*** 1. Increase access to publicly funded Medication Assisted Treatment (inpatient and outpatient). 2. Increase funding to expand publicly funded treatment facilities and services including Residential Level 2 and 4 beds. 3. Increase funding to expand publicly funded capacity for non-secure Detox beds). 4. Expand the use of Vivitrol as a medication for Medication Assisted Treatment. 5. Increase funding to create a publicly funded secure Detox or Addictions Receiving Facility for youth and adults.	Palm Beach County Government Southeast Florida Behavioral Health Network (SEFBBHN) Palm Beach County Government SEFBHN SEFBHN		

	6. Increase bed capacity through scholarship beds at for-profit providers to help divert individuals into treatment immediately following discharge from hospital or jail.			
Strategy 3 Establish coordinated response for effective community integration following hospital and jail discharge	***Activity/Intervention*** 1. Provide funding for access to peer support specialists and case managers or navigators to support individuals who are preparing for discharge from hospital or jail. 2. Provide education and training to discharge planners at hospitals and jails regarding community-based options following discharge.	SEFBHN SEFBHN		
Strategy 4 Establish guidelines to support harm reduction strategies	***Activity/Intervention*** 1. Create plan to intervene to advance disease control by implementing a clean syringe program. ▪ Collaborate with University of Miami to determine expansion feasibility into Palm Beach County. ▪ Identify and seek private funding to support syringe exchange program. ▪ Provide education on safe syringe usage. ▪ Promote and educate regarding syringe exchange programs. 2. Investigate the use of additional harm reduction strategies such as medical marijuana.	No Public Funding will be used for this strategy Will need to secure private funding		
Strategy 5 Expand treatment resources to specialized priority populations	***Activity/Intervention*** 1. Increase funding to support publicly funded special residential services for pregnant and parenting women with their children. 2. Investigate the use of harm reduction strategies such as LARC (Long-Acting Reversible Contraceptives). 3. Develop plan to engage and support 18-25 year-olds in treatment through peer support rather than traditional treatment strategies.	SEFBHN SEFBHN Palm Beach County Sheriff's Office Palm Health Care		

	4. Enhance in-custody treatment provision and evaluate effectiveness of programs. 5. Identify needs specific to communities of color and develop plan to address those needs. 6. Identify needs specific to linguistically and geographically isolated populations and develop plan to address those needs, including telemedicine solutions. 7. Increase funding to support specialized urinalysis for Drug Court participants.	Palm Health Care Palm Beach County Government		
Strategy 6 Develop mechanisms to engage insurance industry	***Activity/Intervention*** 1. Develop plan to establish communication with insurance providers through the Florida Insurance Commission. 2. Mandate prescriber Prescription Drug Monitoring Program (PDMP) and proactively use data for law enforcement and insurance education purposes. 3. Authorize third party payers to access PDMP data with proper precautions.	SEFBHN TBD, Work with State officials TBD, Work with State officials		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Public Safety and Law Enforcement Response				
Strategy 1 Expand diversion services to decrease criminalization of substance use	***Activity/Intervention*** 1. Identify a community to evaluate the potential for implementation of a LEAD (Law Enforcement Assisted Diversion) pilot project. 2. Evaluate and scale based upon results. 3. Develop a plan to support "Ban the Box" initiatives.	***Person/Entity(s) Responsible*** Criminal Justice Commission Palm Beach County Sheriff's Office **TBD** **TBD**	***Timeframe***	***Resources Needed***
Strategy 2 Enhance law enforcement strategies to address special needs	***Activity/Intervention*** 1. Implement and evaluate the Designer Drug Enforcement Act. 2. Evaluate the use and effectiveness of the Marchman Act. 3. Educate local law enforcement on privacy laws and promote better interagency collaboration.	**TBD** Palm Beach County Government Palm Beach County Sheriff's Office		
Strategy 3 Enhance public safety strategies for responding to the opioid epidemic	***Activity/Intervention*** 1. Develop plan to ensure access to Medication Assisted Treatment (MAT) in correctional facilities and upon re-entry into the community. 2. Ensure evidence-based practices for Drug Court are in place utilizing the most current literature, such as those developed by the National Association of Drug Court Professionals as well as evidence-based and culturally proficient treatment practices such as manualized curriculum (e.g., MATRIX Model, MRT-Moral Reconation Therapy, and MST-Multi-Systemic Therapy). 3. Provide support to Drug Court to facilitate real-time access to treatment services.	Palm Beach County Sheriff's Office Palm Beach County Drug Court Palm Beach County Government		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Public Safety Strategies for Reducing Illicit Supply and Demand				
Strategy 1	***Activity/Intervention***	***Person/Entity(s) Responsible***	***Timeframe***	***Resources Needed***
Support the local Drug Enforcement Administration (DEA), High Intensity Drug Trafficking Area Program (HIDTA) and other law enforcement efforts	1. Establish a collaborative information sharing environment that breaks down silos across agencies to better understand trends and target interventions. 2. Develop a plan to leverage assets from partner entities to improve data collection and intelligence sharing to restrict the supply of illicit opioids. 3. Develop a plan to expand law enforcement partnerships and data access to better target over-prescribers. 4. Develop a plan to reduce the illicit supply of substances by identifying retail and mid-level drug traffickers.	Palm Beach County Government DEA DEA DEA		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Public Policy and Legislative Advocacy				
Strategy 1 Create mechanisms to address insurance issues in the industry	***Activity/Intervention*** 1. Develop plan to structure Medicaid programs to promote safe opioid prescription practices and access to treatments. 2. Develop plan to allow individuals in-custody to continue receiving Medicaid benefits until convicted, sentenced and incarcerated and suspend, rather than terminate Medicaid for individuals in jail.	***Person/Entity(s) Responsible*** SEFBHN Department of Children and Families AHCA	***Timeframe***	***Resources Needed***
Strategy 2 Prescription Drug Monitoring Program	***Activity/Intervention*** 1. Develop plan to increase use of Prescription Drug Monitoring Program. 2. Establish plan to ensure adherence to prescribing guidelines. 3. Develop plan to proactively use PDMP data for law enforcement and education purposes. 4. Develop plan to work with State licensing boards for health professions and law enforcement to investigate high-risk prescribers and dispensers.	TBD TBD TBD TBD		
Strategy 3 Licensing and Certification of Facilities and Services	***Activity/Intervention*** 1. Advocate for changes to Chapter 397 and DCF responsibilities to license and monitor treatment facilities and sober homes adequately and effectively. (per Sober Homes Task Force recommendations and Grand Jury Report).	State Attorney's Office		
Strategy 4	***Activity/Intervention***	State Attorney's Office		

Create mechanisms to prevent and prosecute Patient Brokering	1. Promote adoption of amendment of §817.505, Florida Statute, to prohibit the solicitation or receipt of any "benefit" in exchange for referrals or treatment. 2. Promote the increase of criminal penalties and minimum fines for patient brokering. 3. Work with the Office of Statewide Prosecution to prosecute patient brokering.	State Attorney's Office State Attorney's Office		
Strategy 5 Create mechanisms to prohibit deceptive advertising and punish with criminal sanctions	***Activity/Intervention*** 1. Advocate for the enactment of §397.55 "Prohibition of Unethical Marketing Practices" and §817.0345 "Prohibition of Fraudulent Marketing Practices." 2. Develop plan to advocate for recommendations made by the Sober Homes Task Force under "Marketing" and the Grand Jury Report recommendations.	State Attorney's Office Sober Homes Task Force		
Strategy 6 Create opportunities for funding advocacy	***Activity/Intervention*** 1. Develop a plan to advocate and lobby the Legislature for additional funding for law enforcement training in the areas of patient brokering, marketing and healthcare fraud in the substance abuse treatment industry.	Sober Homes Task Force		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Ancillary Services				
Strategy 1	***Activity/Intervention***	***Person/Entity(s) Responsible***	***Timeframe***	***Resources Needed***
Create opportunities to support the development of ancillary services to support individuals' recovery efforts	1. Develop plan to increase capacity of certified sober homes. 2. Develop plan to increase access to housing, including emergency shelters, supportive housing, and permanent housing. 3. Develop plan to increase access to childcare, transportation, and employment for individuals in recovery. 4. Develop "Voucher Return Program" for out-of-state or out-of-county individuals who have received treatment and who wish to return home and who lack resources. 5. Develop plan to increase access to benefits such as Medicaid.	Sober Homes Task Force Housing Coalition Heroin Task Force Palm Beach County Government SEFBHN		

Palm Beach County Opioid Initiative Strategic Plan				
Area of Focus: Evaluation and Monitoring				
Strategy 1 Create mechanisms to evaluate trends and emerging issues	***Activity/Intervention*** 1. Monitor future Florida Youth Substance Abuse Survey, Youth Risk Behavior Surveillance Survey, and Behavior Risk Surveillance Survey to evaluate at-risk and vulnerable populations for priority prevention programming. 2. Utilize data collected across systems, departments, and community-based efforts to drive decision-making efforts. 3. Develop a plan to evaluate the utilization and effectiveness of the Marchman Act. 4. Create a plan to evaluate the use of urinalysis and other testing procedures approved by insurance companies by treatment providers and sober homes.	***Person/Entity(s) Responsible*** SEFBHN SEFBHN CQI Committee Palm Beach County Government Sober Homes Task Force	***Timeframe***	***Resources Needed***
Strategy 2 Create opportunities to expand oversight of licensing of treatment providers and certification of sober homes	***Activity/Intervention*** 1. Develop recommendations to ensure necessary resources (including staff and authority) are available to DCF to support the licensing and monitoring of treatment providers and recovery residences, as well as investigate complaints. 2. Develop plan to require DCF license and FARR certification for commercial recovery residences, especially those that contract with treatment providers. 3. Establish ethics board for peer accountability in the local treatment industry. 4. Create the "Palm Beach 100," a network of quality, vetted providers who are willing to contract with public organizations to provide addiction treatment services.	Sober Homes Task Force Steering Committee RAP RAP		

Strategy 3 Expand opportunities to strengthen and support the workforce	***Activity/Intervention*** 1. Develop a plan to expand and strengthen the workforce and infrastructure for providing evidence-based Medication Assisted Treatment and recovery services 2. Conduct an analysis of the workforce in the publicly funded substance abuse treatment industry including turnover and retention and salary structure compared to for-profit treatment providers and develop recommendations. 3. Develop a plan to support First Responders as the frontline response to the opioid epidemic.	SEFBHN SEFBHN Palm Beach County Fire Rescue Palm Beach County Sheriff's Office		
Strategy 4 Create opportunities for evaluation of the efficacy of implementation of plan's activities.	***Activity/Intervention*** 1. Develop an evaluation plan to include agreed upon metrics for assessing the implementation of strategies identified in the Strategic Plan. 2. Include and implement rapid cycle performance monitoring, reporting, and quality improvement strategies and track on a regular basis. 3. Ensure that outcome data is integrated into evaluation plan and is aligned with federal indicators.	Palm Beach County Government Palm Beach County Government Palm Beach County Government		

Palm Beach County
Board of County Commissioners

APPENDIX B

PALM BEACH COUNTY

SYSTEM OF CARE MODEL

Goal 1: Establishing a readily accessible, integrated and coordinated recovery-oriented system of care that meets the needs of Palm Beach County residents / PBC System of Care Model

Neutral Care Coordination (NCC) is services provided by a non-conflicted, neutral body functioning as a single point of entry for referrals to providers. Services include assessment, initial level of care determination, referral, care coordination across a continuum of clinical and non-clinical care, as well as prior authorization and payment of certain care. NCC values individualized care and individual choice in development of care plans. Individualized care plans are the primary drivers of care engagement and are aimed at achieving successful, seamless movement along a continuum of clinical care through non-clinical recovery support and social services to improve long-term recovery outcomes.

Care Provider Network is comprised of a network of coordinated community-based services and supports that is person-centered and builds on the strengths and resilience of individuals, families, and communities to achieve improved health, wellness, and quality of life for those with or at risk of experiencing mental health or substance use concerns.

Recovery and peer support services are often delivered by individuals with lived experiences who have a unique capacity to help effected individuals based on this experience. These services will be provided through a network of Recovery Community Organizations and Recovery Community Centers. Recovery Capital Indexing has been integrated into the system of care to inform individualized recovery plans and measure the efficacy of recovery and peer support interventions on long-term recovery outcomes.

APPENDIX C

OPIOID DATA TO ACTION (OD2A)

2020 CDC FINAL REPORT

2020 OPIOID-RELATED OVERDOSE SURVEILLANCE REPORT

PALM BEACH COUNTY, FLORIDA

Funding Agency

Centers for Disease Control and Prevention
Grant No. CDC-RFA-CE19-1904

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Data Source Acknowledgments

The Florida Department of Health (FDOH) in Palm Beach County would like to acknowledge all Palm Beach County hospitals for participating in the voluntary ESSENCE surveillance system that makes syndromic surveillance data collection and analysis possible. We would like to express gratitude to the ten hospitals that participated in non-fatal overdose surveillance in 2020.

We would also like to extend our sincerest appreciation to Dr. Wendolyn Sneed, Mr. Paul Petrino, and the entire collection of dedicated staff at the Palm Beach County Medical Examiner Office for not only sharing their data, but for sharing their time, knowledge, and passion for reducing overdose mortality.

We gratefully acknowledge all organizations in our extensive list of community partners we have worked throughout the county. Our shared goals are made stronger by our partnerships.

Finally, we would acknowledge the Centers for Disease Control and Prevention for technical support and funding through the Overdose Data to Action grant. The content expressed in this report is solely that of the authors and does not necessarily represent the views of the Centers for Disease Control and Prevention.

Executive Summary

Background

The purpose of this report is to provide an overview of the opioid-related overdose surveillance in 2020 for Palm Beach County, FL (PBC) conducted by the Florida Department of Health (FDOH) in PBC under the Centers for Disease Control and Prevention (CDC) Overdose Data to Action (OD2A) grant.

Methods

We aimed to provide a comprehensive surveillance report incorporating multiple data sources. The information presented in this report contains data collected through agreements with local hospitals, the Palm Beach County Medical Examiner's office, and hospital discharge data provided by the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) database.

Results

The results of PBC overdose surveillance identified 3,475 opioid-related overdoses identified through syndromic surveillance, 892 non-fatal opioid-related overdose emergency department (ED) medical records, and 528 fatal overdoses involving opioids. Across all three data sources, most of the overdoses occurred in White, Non-Hispanic, men. Adults aged 24-35 were most likely to experience a non-fatal or fatal overdose compared to over age groups. The most frequently report opioid in both syndromic surveillance and non-fatal overdose surveillance was heroin, whereas the most frequent opioid implicated in a fatal overdose was fentanyl.

Introduction

Throughout the span of the US drug overdose epidemic, Florida has remained at the forefront of this devastating public health crisis. Drug overdose mortality has had record breaking years recently, and 2019 was no exception. In 2019 alone, 5,268 Floridians lost their lives to a drug overdose at an age-adjusted rate of 25.5 deaths per 100,000 people, an increase of 11.8 deaths per 100,000 people from 2018[1]. The recent waves of fentanyl, fentanyl analogs, and novel psychoactive substances (NPS) starkly contrast from the 1990s prescription opioid epidemic. This is partly due to provider outreach and education for the Prescription Drug Monitoring Program (PDMP) by the Florida Department of Health (FDOH). Data from the 2019-2020 PDMP Annual Report described an increasing enrollment in both prescribers and dispensers in the system used to track controlled substance prescriptions which has correlated with a decrease in opioid prescriptions and a decreased in the strength of opioids prescribed[2].

Despite the decrease in rates of prescription opioid overdoses, Florida has continued to struggle against overdose morbidity and mortality. Converging public health crises are developing because the opioid epidemic is serving as a catalyst for a surge in infectious disease. Substance use disorder (SUD) and opioid use disorder (OUD) are a risk factors for viral infections such as human immunodeficiency disorder (HIV) and Hepatitis C infection (HCV), and are associated with high risk behaviors such as injection drug use (IVDU) practices and risky sexual behaviors[3]. In addition, contaminated drugs, drug paraphernalia as well as bacteria found at the injection site can cause infection as the site of injection[3]. In 2017, 9.7% (N=3,690) of the new HIV diagnoses were associated with injection drug use (IVDU)[4]. More specifically, 110,034 persons were living with a diagnosed HIV infection in Florida and of those, 11.4% of male cases was credited to IVDU or risky sexual behaviors. As well, among female cases in Florida, 12.4% were attributed to IDVU[5]. Pregnant women with OUD also carry a unique risk of delivering a child with neonatal abstinence syndrome (NAS) or Neonatal withdrawal (NOWS). Recent studies suggest that the rates of babies diagnosed with NAS in Florida have increased by 10-fold from 2005 to 2011[6]. State surveillance for NAS is limited, and more investigation is needed to truly comprehend the scope of NAS in Florida.

The need to address this public health crisis extends beyond the desire to prevent individual mortality. Overdose deaths can also have significant emotional and mental health implications on family members and friends of the deceased. Overdose related deaths are often abrupt and are generally associated with feelings of secrecy, shame, social stigmas and can produce feelings of helplessness, shame, and guilt[7]. By addressing the issue of overdose morbidity and mortality, we are also addressing the issue of incarceration, communicable disease, crowded state-run foster homes, and climbing healthcare cost. The prevention and treatment of SUD is extremely complex, and deeply embedded with many aspects of the social-ecological framework of thinking. The development of an effective solution or opioid prevention and treatment requires an inclusive framework where individual, community, and society factors are identified, and resources are created to successfully navigate through the crisis[8].

Locally, Palm Beach County is one of the most populous counties in Florida, with an estimated population of about 1.5 million residents[9]. Palm Beach County has seen an increase in opioid related overdose mortality along with the rest of the state and the United States. To combat the opioid crisis in Palm Beach, stakeholders in the community united and worked together to develop an innovative partnership between the Health Care District, JFK Medical Center and the Palm Beach County Commissioners Office. A product of this partnership came into fruition on February 5th, 2020, with the opening of the Addiction Stabilization Unit (ASU) within JFK Medical Center's North Campus in West Palm Beach[10]. The purpose of this unit is to receive patients from different reaches of Palm Beach County and provide overdose stabilization along with options long-term treatment[10].

In September of 2019, the Florida Department of Health for Palm Beach County (PBC) was one of three counties in the state of Florida (along with the state itself) to be awarded funding from the CDC under the Overdose Data to Action (OD2A) grant. Under the grant, PBC was awarded $11.3 million over 3 years (extended to 4 in 2021) to implement 8 strategies related to overdose surveillance and prevention; the 8 strategies are: Implement Innovative Surveillance to Support NOFO Interventions, Prescription Drug Monitoring Programs (PDMPs), Integration of State and Local Prevention and Response Efforts, Establishing Linkages to Care, Providers and Health Systems Support, Partnerships with Public Safety and First Responders, Empowering Individuals to Make Safe Choices, and Prevention Innovation Projects. The goal of housing these 8 strategies under one roof in PBC is to ensure that the results of implementing innovative surveillance translate into more robust and targeted prevention activities. Under the "Implement Innovative Surveillance to Support NOFO Interventions" strategy, PBC has focused on six activities with an eye towards the overall objective of "Innovate Surveillance of Drug Use/Misuse". These 6 activities, which range from data collation from various sources to cross-county meetings with Broward County, are all aimed at getting access to as much data as possible, as frequently as possible, for comprehensive analysis and reporting in a timely matter that allows for spikes in overdoses to be caught early and prevention activities to respond in-kind. To date, over 3,000 medical records have been collected and over 500 reports from the Medical Examiner's office reviewed. Data analysis has taken the form of both traditionally statistical analysis as well as GIS spatial analysis which has allowed PBC to map overdoses and target prevention accordingly. Department of Health Palm Beach County seeks utilize the surveillance data to drive prevention and response efforts throughout the County. The surveillance component of the project will enable Palm Beach County to have access to high quality and timely data on overdoses in the county. Specific data will be collected and analyzed to identify the drug burden in the county. This data will be shared with community partners and various stakeholders engaged in local opioid related committees, and tasks force to combat the drug crisis in the county. Palm Beach County continues to build strategic collaborative partnership, and leverage resources with key community partners.

The goal of the surveillance component of the project is to influence the prevention component and to decrease opioid use and opioid use disorder. Palm Beach County has seen this data collected being put into action through increased prevention and education efforts in the county. ED data is shared monthly with the task force and community partners. Community partners use the data to target prevention and outreach efforts. Palm Beach County is currently working with various stakeholders and task force in ramping up prevention efforts throughout the county, which is all directed by the data that has been collected.

Methods

In 2020, opioid-related overdose surveillance included information from three primary sources. ESSENCE database was used for the de-identified syndromic surveillance of opioid overdose ED data, including both morbidity and mortality. Patient-level morbidity data was obtained through ED medical records from participating hospitals. Patient-level mortality data was obtained from PBC MEO. Details of the data and analysis methods of the surveillance system are outlined below.

	ESSENCE Data	Non-Fatal ED Data	Fatal Data
Date	January 2020 -December 2020	January 2020 - December 2020	January 2020 - December 2020
Source	Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)-web based syndromic surveillance system	Medical Records from 10 local Hospitals. Date of collection varied by hospital.	Palm Beach County Medical Examiner's Office (PBC MEO)
Data Type	ED chief complaint and discharge diagnosis data	Hospital ED data for overdoses — hospitals faxed medical records from patients that came in for an opioid-related overdose	All drug/poison deaths as categorized by the PBC MEO
Variables	Patient demographics (age, race, ethnicity, gender), hospital, zip code, time, ED chief complaint, discharge diagnosis	Patient demographics (age, race, ethnicity, gender, employment status, housing status, insurance status), substances involved in overdose, toxicology screen, overdose incident details, medical interventions (opioid reversal medication, clinical procedures), clinical outcome (diagnosis, discharge status), criminal history, past medical history, social history	Decedent's demographics (age, race, ethnicity, gender, occupation, housing, military services, education level, PBC residency), overdose incident details (location, jurisdictions responding, who found the decedent, paraphernalia found on scene), death details (location, manner of death, cause of death, autopsy findings), toxicology screen, medical interventions, criminal history, past medical history, social history
Initial assessment	Syndrome chief complaint and discharge diagnosis categories that contain ICD codes drug terms to monitor suspected drug overdoses	Medical records are sorted based on inclusion/exclusion criteria to extract opioid-related overdose ED records	Classification of deaths involving opioids based on PBC MEO cause of death
Spatial data	N/A	N/A	Residential and incident location
Temporal data	Date of ED visit	Date of ED visit	Date of death

ESSENCE Syndromic Overdose Surveillance

Data Collection

De-identified data is downloaded from the ESSENCE database for syndromic surveillance. ESSENCE has three functions that include data ingestion, alerting, and analysis and visualization. During the data ingestion process, hospital data is received electronically and placed in syndrome groups. The groups have an algorithm that is applied and creates alerts to users so that they can further investigate any patterns or outbreaks. Lastly, ESSENCE provides the data to be expressed spatially and temporally using many different formats. Data is pulled using a query portal that allows the user to input the data source, start and end dates, and add query fields. The query field that we use is the CC and DD Category called “Drug-CDC All Drug v2 OD2A”. This pre-defined query pulls ED data for incidences in which the chief complaint or discharge diagnosis include specific drug-related terms – such as “opioids”, “benzodiazepines”, “overdose”, etc. – or incidences in which ICD-10-CM codes corresponding with drug overdose or poisoning were recorded.

Case Definition

Data pulled from ESSENCE was manually examined for inclusion and exclusion criteria pertaining to opioid-related drug overdose surveillance. Records where the discharge diagnosis reported ICD-10-CM codes for opioid overdose (T40.0, T40.1. T40.2. T40.3, T40.4, T40.6) were automatically included as an opioid-related overdose. ICD-10-CM codes for opioid abuse (F.11.1), opioid dependence (F11.2), and opioid use (F11.9) – excluding F11.11 and F11.21 – were included as an opioid-related overdose if the chief complaint included an overdose term such as “overdose”, “poisoning”, “unconscious”, etc.

Variables and Analysis

Data collected was de-identified and included date and time of emergency department visit, and the ED hospital name. Demographics for opioid-related overdose included patient age, gender, race, ethnicity, chief complaint, and discharge diagnosis. In total, out of 10,071 entries on ESSENCE pulled from the query field, we were able to select 3,475 opioid overdoses by using the inclusion/exclusion criteria described earlier. The records that were excluded were non-opioid overdoses, general drug use, or patients experiencing withdrawal symptoms. Microsoft Excel (Microsoft Corporation, Redmond, WA) was used for data management and analysis.

Opioid-Related Overdose Morbidity

Data Collection

In April 2020, medical record collection began for patients admitted to the ED from one of ten participating hospitals in the PBC. The overdose incident dates range from January 2020 to December 2020. A list of participating hospitals can be found in Table 1.are detailed below. Supplemental patient data were obtained through multiple databases with the purpose of record completeness and providing a whole patient surveillance. For a list a databases and information obtained from them, see Table 2 All

physical copies of ED records were securely stored in locking file cabinets behind no less than two locked doors. Electronic versions of ED records were stored securely in Merlin system. All ED records were handled in accordance with Health Insurance Portability and Accountability Act (HIPAA) regulations.

Case Definition

Emergency department records received from local hospitals were manually reviewed to determine if the opioid-related overdose case definition was met. Records were included if they met one of the following criteria: chief complaint or discharge diagnosis of opioid overdose, Narcan (naloxone) given with a positive clinical response, and clinically compatible opioid overdose symptoms with either the patient reporting opioid use or a high degree of suspicion of opioid use by EMS or clinician. Records that were reported instances of patient requesting detox for opioid without meeting any of the prior opioid-related overdose criteria were excluded.

Variables and Analysis

Data collected on included demographic information, medical history, substance use history, criminal history, and overdose incident information. The social ecological framework was applied to the design of overdose surveillance collection. The resulting variable list was created with the purpose of providing a comprehensive overdose surveillance report that incorporated social determinants of health. Demographic information included: age, gender, race, ethnicity, employment, insurance, housing status, and patient-reported social history. Missing or incomplete demographics in the ED records were supplemented with alternative databases. Opioid-related overdose incident information included: signs and symptoms of overdose incident, polysubstance use related to the incident, toxicology screens, treatment prior to arrival, course of treatment in ED, medications administered, and disposition at time of ED discharge. Patient medical history was obtained from ED records, Merlin, and Surveillance Tools and Reporting System (STARS) databases. Variables included: history of chronic pain, mental health and psychiatric diagnoses, viral hepatitis, HIV, and STDs. Social history was collected from ED records and including substance abuse history and IV drug use. Criminal record history was conducted through LexisNexis. It is important to note that criminal history was collected as a means of identifying areas of opportunity for substance abuse prevention and intervention. Any criminal record history ***does not*** indicate guilt or conviction and only indicates that charges were filed against the individual at one point.

In total we collected 892 opioid-related overdose ED records from 769 individuals. We used Microsoft Excel (Microsoft Corporation, Redmond, WA) for data management and SAS version 9.4 (SAS Institute, Cary, NC) was used for data analysis.

Opioid-Related Overdose Mortality

Data Collection

The PBC MEO database was sorted from January 2020 to December 2020 and the analyzed cases were organized by the COD. Of the total 570 cases listed in the MEO database, 528 included a COD that involved at least one opioid or listed a complication

related to an opioid. Each case was abstracted and received a unique patient identifier to protect the patient's privacy. The unique patient identifier allowed us to link prior non-fatal overdose hospital admissions for further analysis. Supplemental patient data was obtained through crosschecks in other databases. All physical records were securely stored in locking file cabinets behind no less than two locked doors. Electronic versions of medical records were stored securely on the Merlin System. All records were handled in accordance with the Health Insurance Portability and Accountability Act (HIPAA) regulations.

Case Definition

The Palm Beach County Medical Examiner's Office (PBC MEO) is used to review the fatal opioid overdoses. While non-fatal overdoses are assessed to determine if they meet specific criteria, fatal overdoses are defined through the opinions stated by the medical examiner physician in the doctor's report after an investigation, autopsy, and toxicology study are conducted. The medical examiner's findings are documented in their investigative report noting various factors that include health conditions, prior substance abuse, and if drug paraphernalia was found at the incident scene. These combined factors aid the physician in determining the cause of death (COD). The OD2A team then utilizes the COD to further review and assess whether the fatality was the result of an opioid or complications from opioid usage. This report includes fatalities where at least one opioid was deemed to cause or contribute to the COD.

Variables and Analysis

Demographic information, overdose incident details, medical history, criminal history, and social history were collected for the fatal overdoses as well. Additional demographic information obtained in fatal overdoses included: military services, education level, Palm Beach County residency. Variables collected from the medical examiner investigation notes of drug overdoses included: place of injury (overdose location), place of death, manner of death, cause of death, autopsy findings, medical interventions, paraphernalia found, drug use with others, reported age when substance abuse began. This information was collected to learn about health issues/complications caused by the substances ingested and better identify overdose incident details and link areas of higher incidence. Additional variables included: jurisdictions responding (EMS and Police agency) and welfare checks conducted by police. This data can help agencies better understand the relationship of those who find an overdosed individual and determine jurisdictions responding to the overdoses to drive prevention strategies. Toxicology findings were collected to learn about the substances ingested and to present findings on frequencies where these substances were marked as cause of death. The toxicology report, investigation report, and autopsy findings provide details as to what drugs were involved in the overdose that serve to help community partners to better understand the extent of overdoses in PBC.

In total we reviewed 570 cases in the PBC MEO database of which 528 met the inclusion criteria for the analysis. Microsoft Excel (Microsoft Corporation, Redmond, WA) was used for data management and SAS version 9.4 (SAS Institute, Cary, NC) was used for data analysis. Spatial analysis was performed using ArcGIS Pro 2.6.0 (ESRI, Redlands, CA).

Results

The findings of the 2020 opioid overdose surveillance for Palm Beach County are detailed in the sections below. Due to the heterogeneity of data sources and variables we were able to collect, the syndromic surveillance findings, morbidity, and mortality data are reported in separate sections.

ESSENCE Syndromic Overdose Surveillance

Figure 1

The data processed from ESSENCE resulted in 3,475 opioid overdose ED visits in 2020. There was an average of 289.6 overdoses per month and 9.5 overdoses per day. Opioid overdoses remained relatively stable through 2020. The largest decrease occurred in February which experienced a decrease of 16%. ED overdose visits peaked in September, increasing 31% from the month prior.

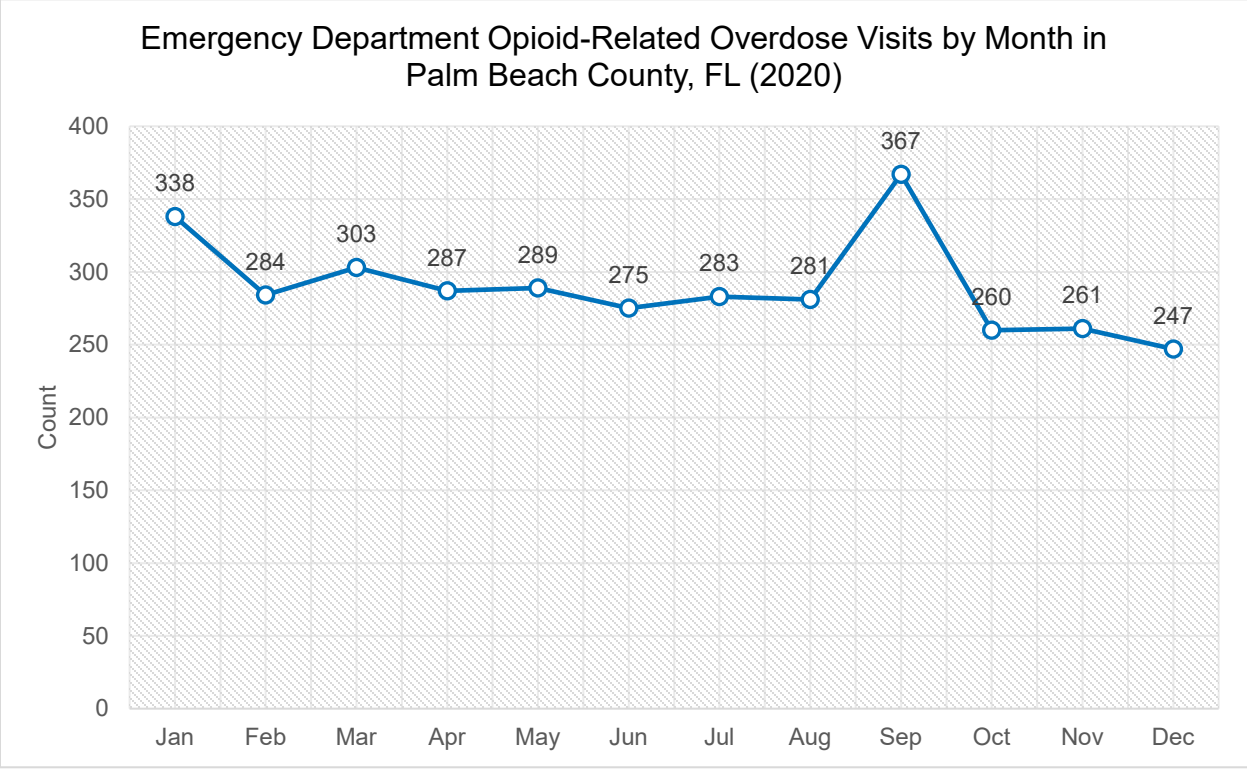


Figure 2

ED opioid overdoses were recorded at all 14 hospitals in the county. JFK Medical Center experienced the highest volume of ED opioid overdoses visits in 2020. With 810 opioid overdoses seen in the ED accounting for nearly a quarter (23.3%) of opioid overdoses. Hospitals located in less populated regions of PBC tended to experience lower volume of ED opioid overdose visits in 2020.

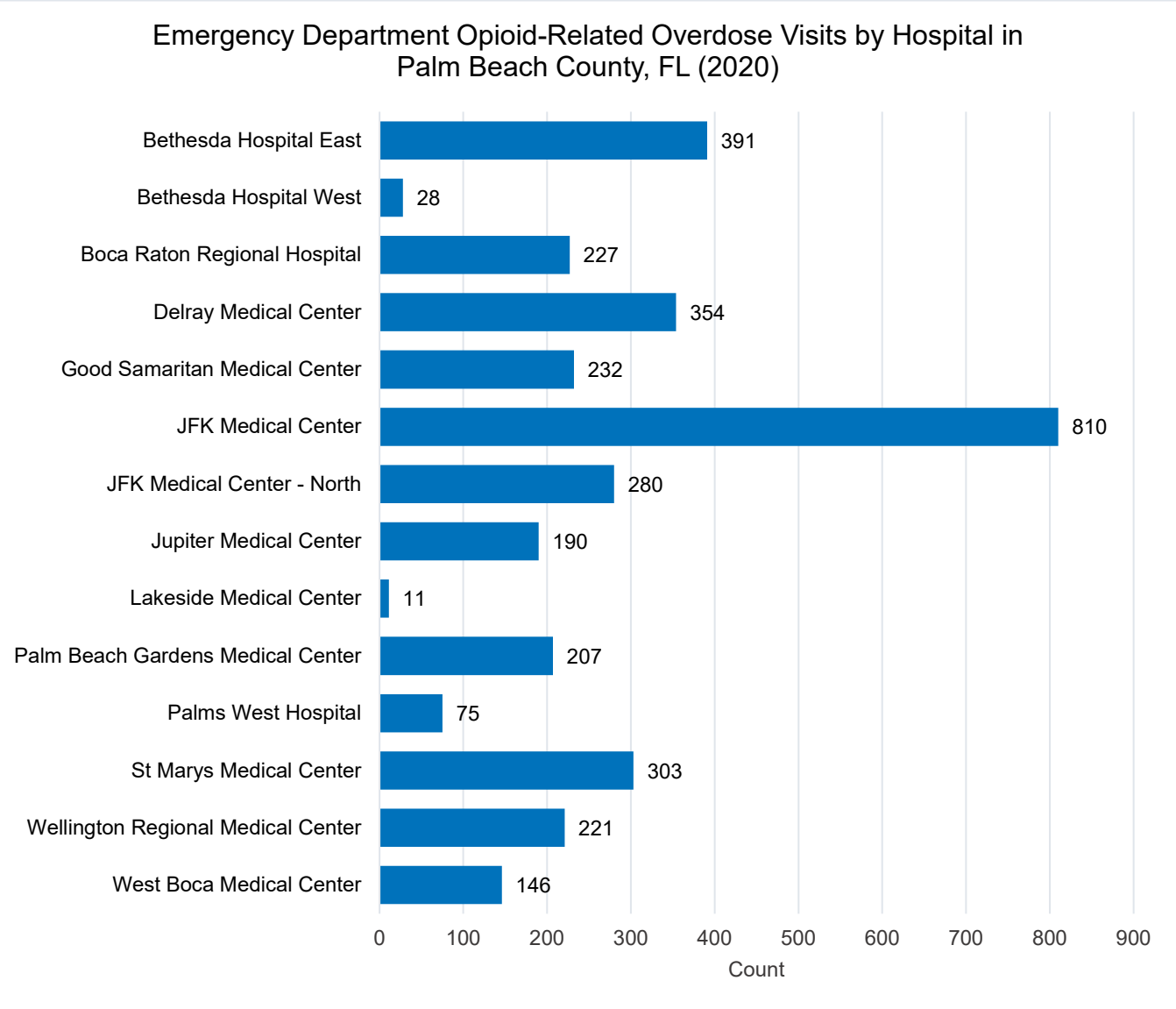


Figure 3

In 2020, the average age of male patients seen in the ED for opioid overdose was 39.3 (SD=14.2) years of age. The average age of female patients was 44.2 (SD=18.3) years of age. The highest proportion of opioid overdoses was found in the 25-34-year age group, followed by the 35-54-year age group. Among children less than 15 years of age, the most ED visits occurred in the 0-3 years age group for both male and female children.

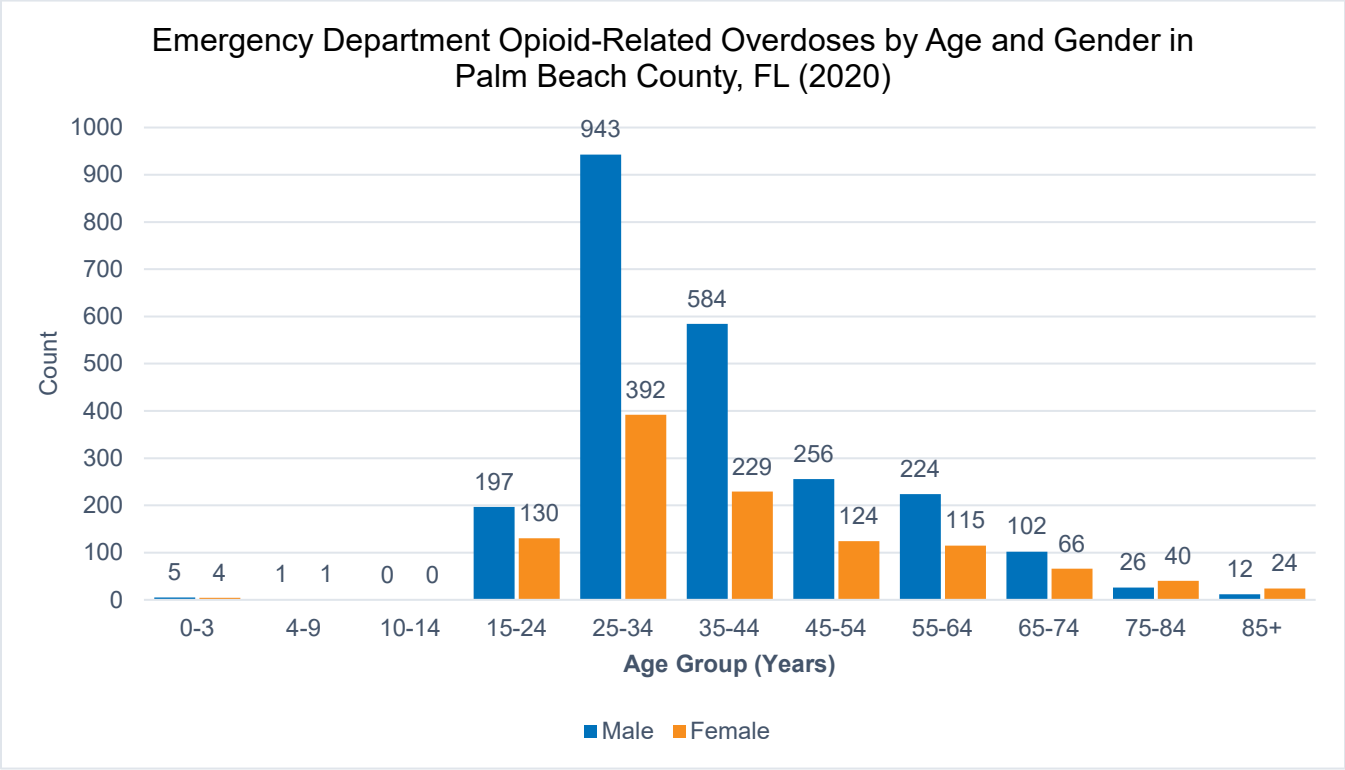


Figure 4

Over half (52.5%) of the ED visits for opioid overdoses in PBC occurred in white males. White females account for the second highest number of ED visits with 28.0% of opioid overdose in 2020. American Indian/Alaskan Native and Native Hawaiian/Pacific Islander accounted for the lowest number of ED visits at 0.12% and 0.14% respectively.

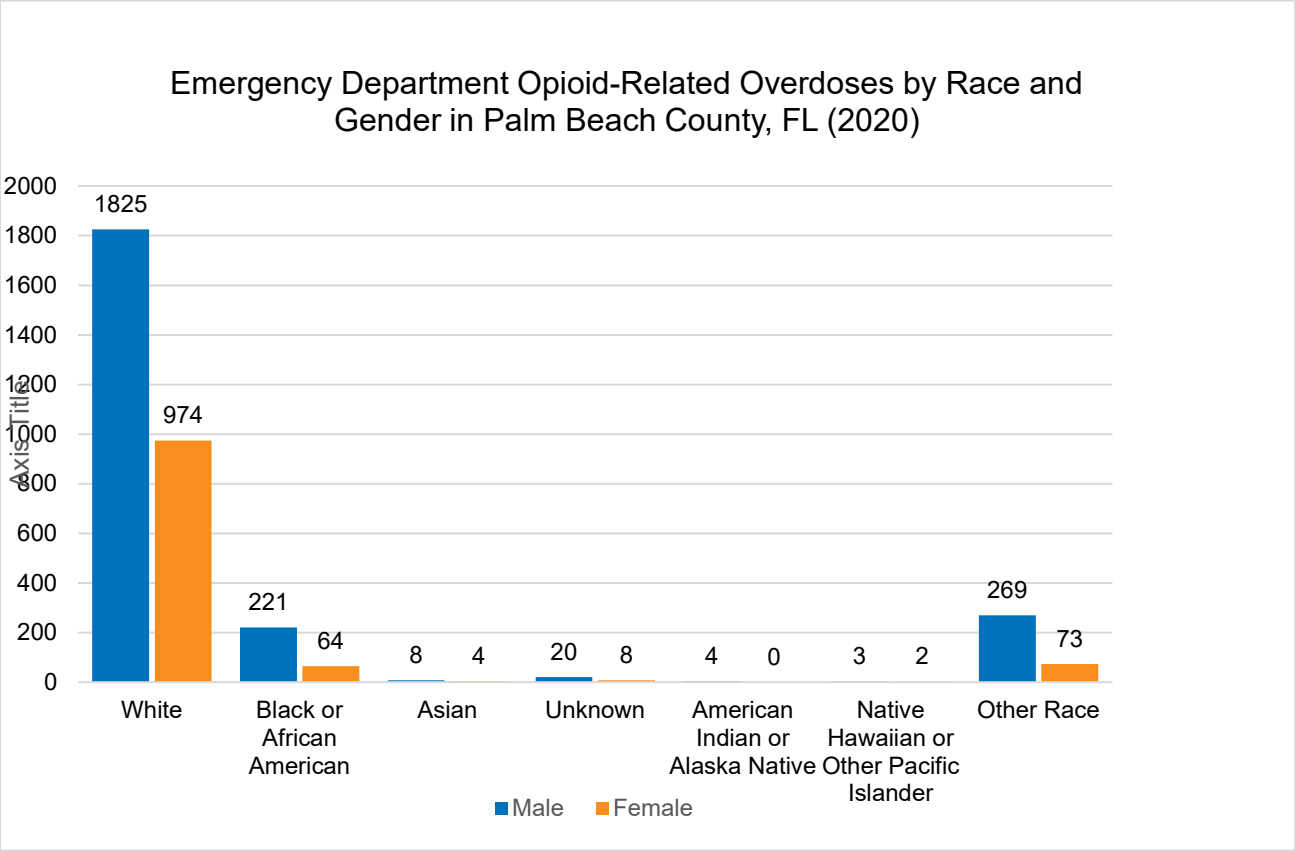
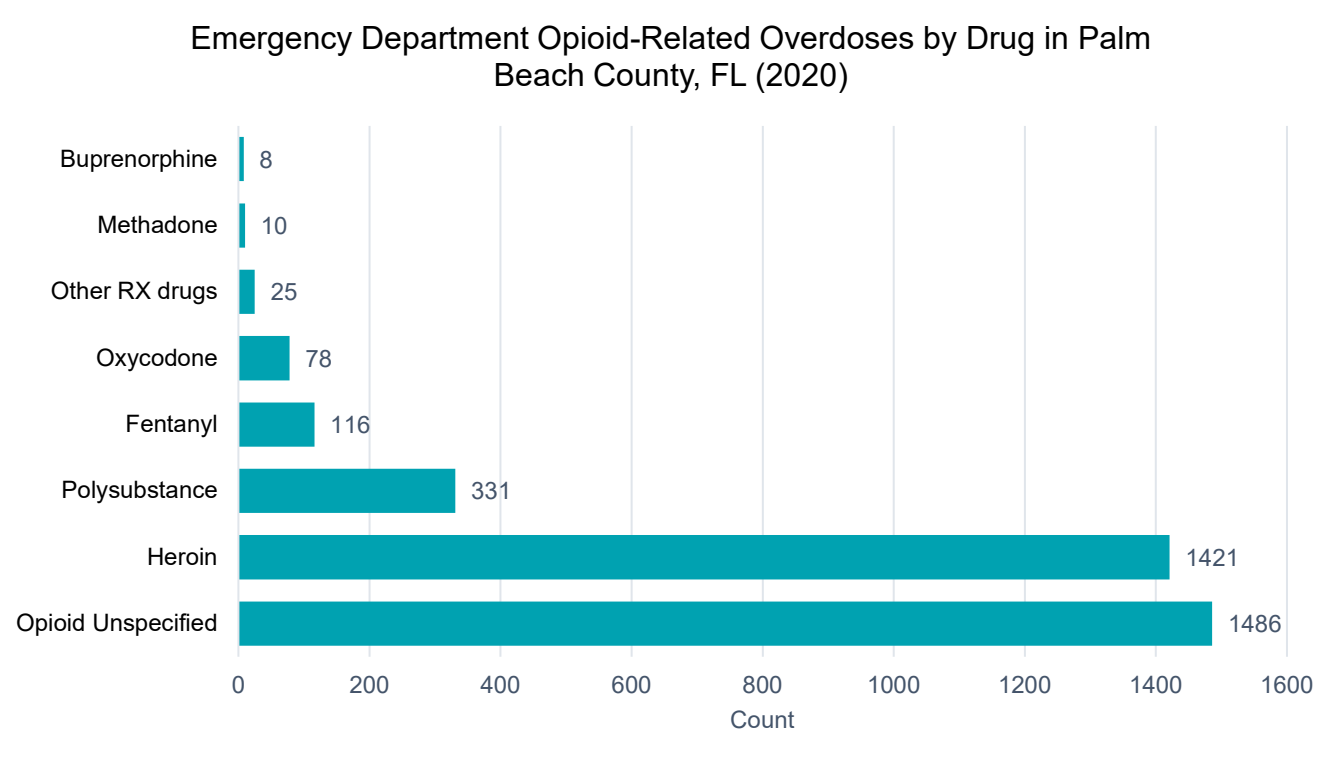


Figure 5

Most of the ED visits for opioid overdoses did not specify a specific drug. It was common in hospital chief complaints or discharge diagnoses to include phrases such as “opioid overdose” without detailing the specific opioid ingested, and thus 43% of ED visits were from unspecified opioids. The highest reported opioid overdose involved heroin, with 1421 heroin overdoses. Medications for opioid use disorder (MOUD) including buprenorphine and methadone accounted for a total of 0.52% of opioid overdoses.



Opioid-Related Overdose Morbidity

Patient Demographics

Summary data for patient demographics and characteristics of opioid-related overdose morbidity can be found in Table 3.

A total of 892 non-fatal opioid-related overdose records were collected and reviewed. The average age of non-fatal opioid-related overdoses was 38.6 years (SD=13.4 years). Non-fatal overdoses were most prevalent among White (85.7%), Non-Hispanic (76.1%), males (67.4%). Of the 291 female patients, 3.4% (N=10) were known to be pregnant at time of overdose. The age groups with the highest proportion of non-fatal overdoses occur among adults aged 25-34 (38.7%) and adults aged 35-44 (25.3%). Patients were typically unemployed (45.6% vs 20.3% employed), and more than half of the patients were uninsured at time of overdose (54.6% vs 37.4% insured).

Instability in housing and criminal history were frequent in PBC. Nine percent of patients reported being homeless, 1.5% of patients reported living in a hotel or motel, and an additional 13.0% of patients reported other types of unstable housing. Other unstable housing included such settings as living in a car, couch-surfing, and other nomadic living conditions. The majority of people with non-fatal overdoses had some form of criminal record history (78.5% vs 21.5% with no criminal record). Most crimes were drug-related (53.1%) such as drug possession and possession of drug paraphernalia. Nineteen percent of patients had a prior charge of driving under the influence (DUI) or driving while intoxicated (DWI).

Relevant patient medical history included chronic pain (17.4%), hepatitis C (37.3%), HIV (2.8%) and other STDs (13.5%). One-third of patients reported a previous mental illness. The most prevalent mental illnesses were depression (24.6%) and anxiety (19.73%). Most of the patients had a history of substance abuse (82.4%) and 30.3% had a history of IV drug use. Participation in a past or current SUD treatment program was reported in 34.4% of patients. Treatment history of buprenorphine based MOUD was reported in 12.0% of patients.

Figure 6

Non-fatal opioid overdose records show males in the 25-34 age group had the highest number of overdoses in 2020. This age group also is the highest proportion for females. For children under the age of 15, the 0-3 age group had the most overdoses.

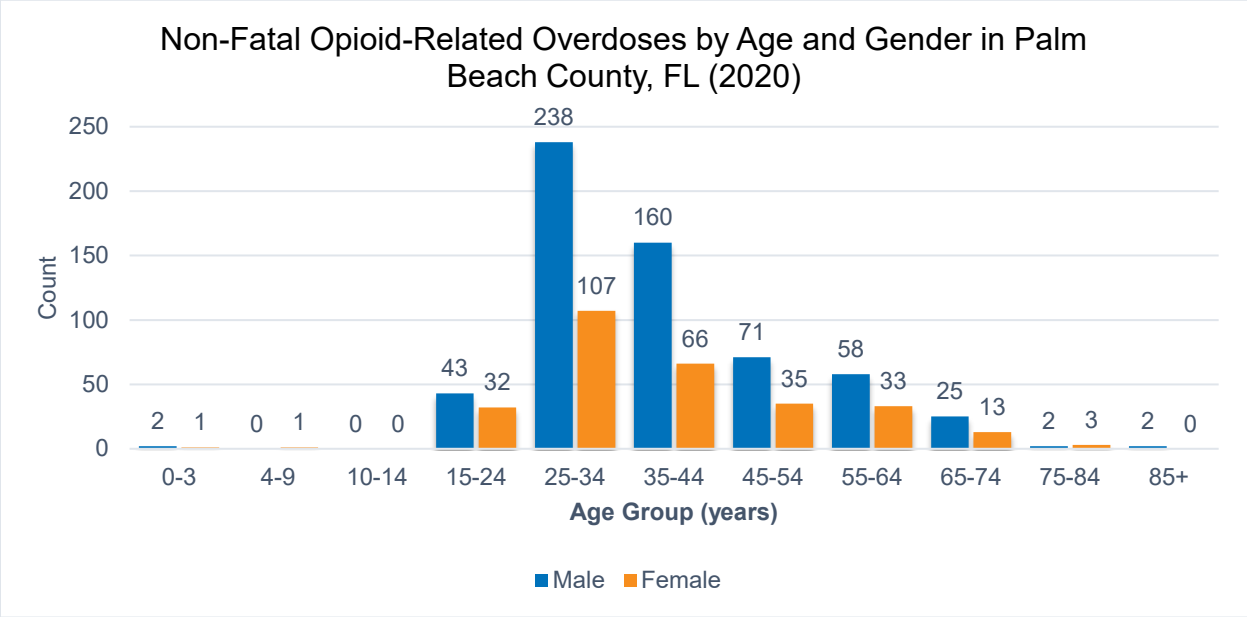
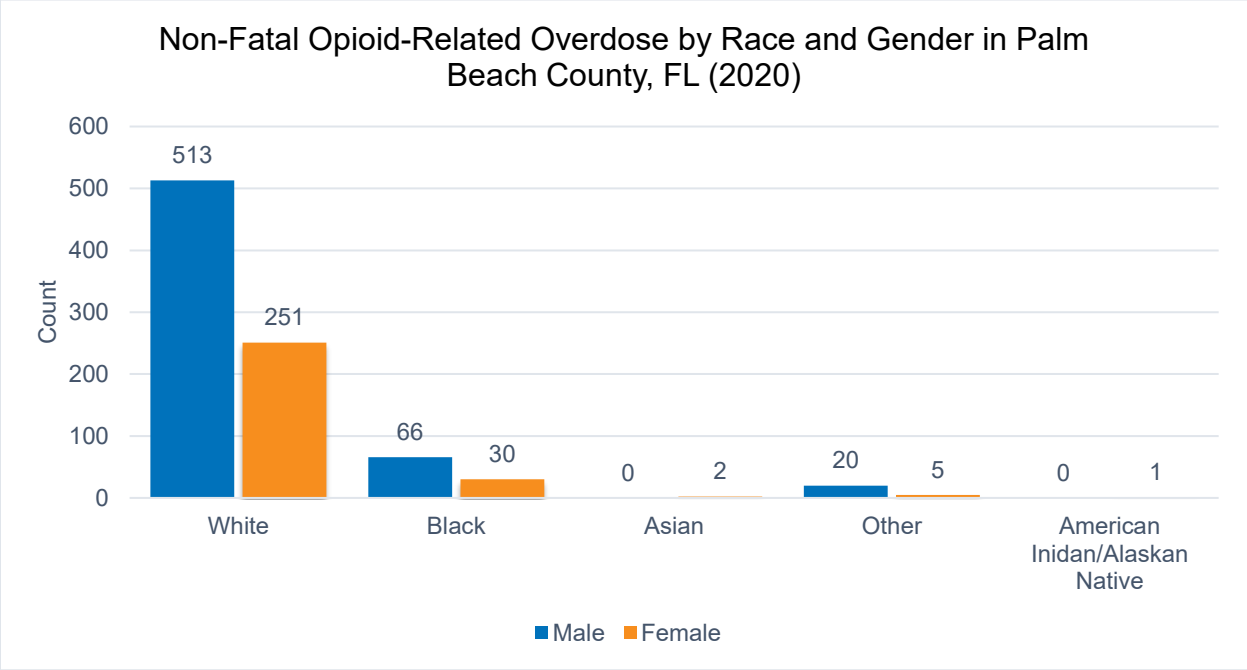


Figure 7

In PBC, more than half (57.8%) of opioid-related overdoses in PBC were white males followed by white females (28.3%). American Indian/Alaskan Native accounted for the lowest number of non-fatal opioid-related overdoses (0.11%).



Overdose Incident Information

Summary data for opioid-related overdose incident information can be found in Table 4.

In 2020, nearly half (47.7%) of non-fatal opioid-related overdoses reported heroin as the type of opioid ingested. Other opioids implicated included fentanyl (21.1%) and oxycodone (11.1%). A quarter of opioid-related overdoses were unspecified in type of substance ingested. Additionally, the opioid route of administration was unreported in 44.7% of overdose records. Alcohol (14.0%), cocaine (13.0%) and benzodiazepines (11.9%) were the most prevalent non-opioid polysubstance used in conjunction with opioids. Most records did not report on internal or external factors that contributed to the patient's substance use and overdose. Of those who reported any contributing factors relating to substance use, patients most frequently mentioned chronic pain as a factor of overdose (5.5%) and depression (3.3%). Complications following opioid-related overdose were present in 27.4% of cases, and 30.9% of patient required inpatient hospitalization. Naloxone (Narcan) was commonly administered as an opioid overdose reversal medication. While more than half of patients received a single dose of Narcan (54.8%), 17.8% of overdoses required additional doses.

Figure 8

The temporal distribution for non-fatal overdose records can be seen in the figure below. The COVID-19 pandemic delayed collection from many hospitals, and few were able to provide an entire year of data. June had the highest number (N=114) of non-fatal opioid overdose records that we were able to collect.

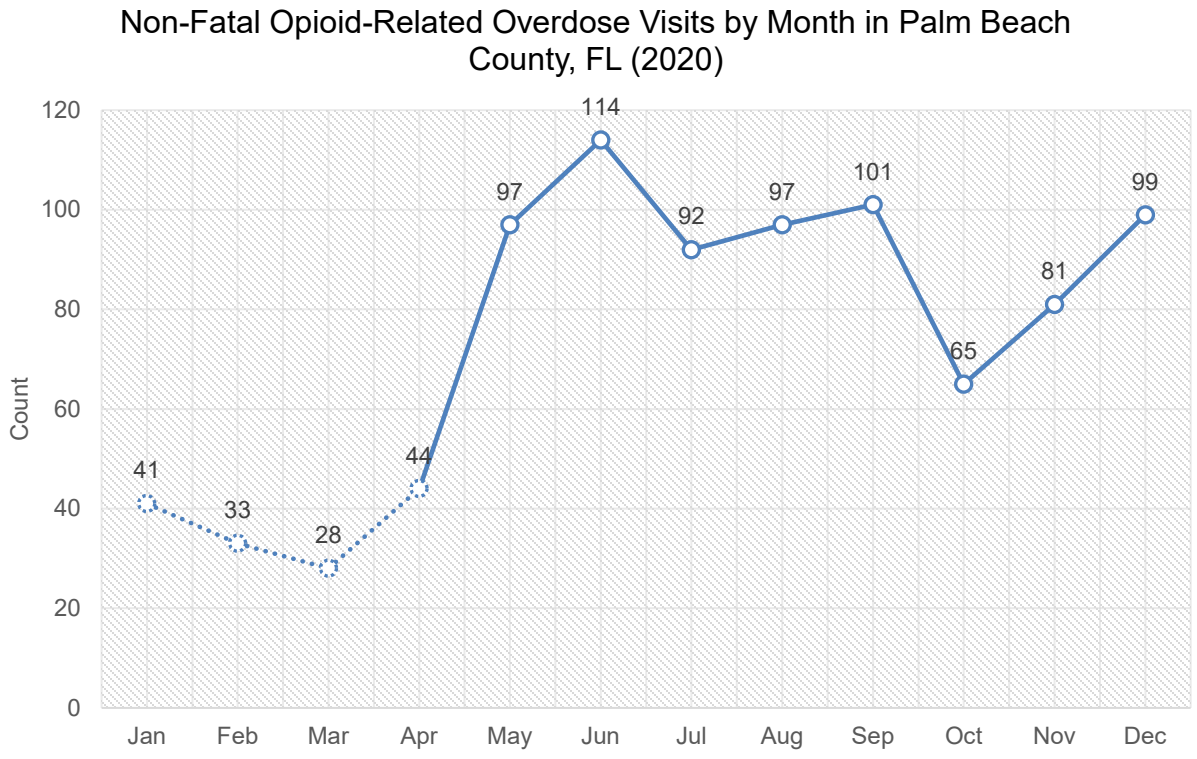


Figure 9

We were not able to collect from three hospitals (Bethesda East, Bethesda West, and Wellington Regional). Most of the opioid-related overdose records we collected came from JFK Medical Center North Campus (N=315). JFK Medical Center North Campus was one of the first hospitals that we started collecting from and has the ASU where patients are stabilized after an overdose and then referred to treatment.

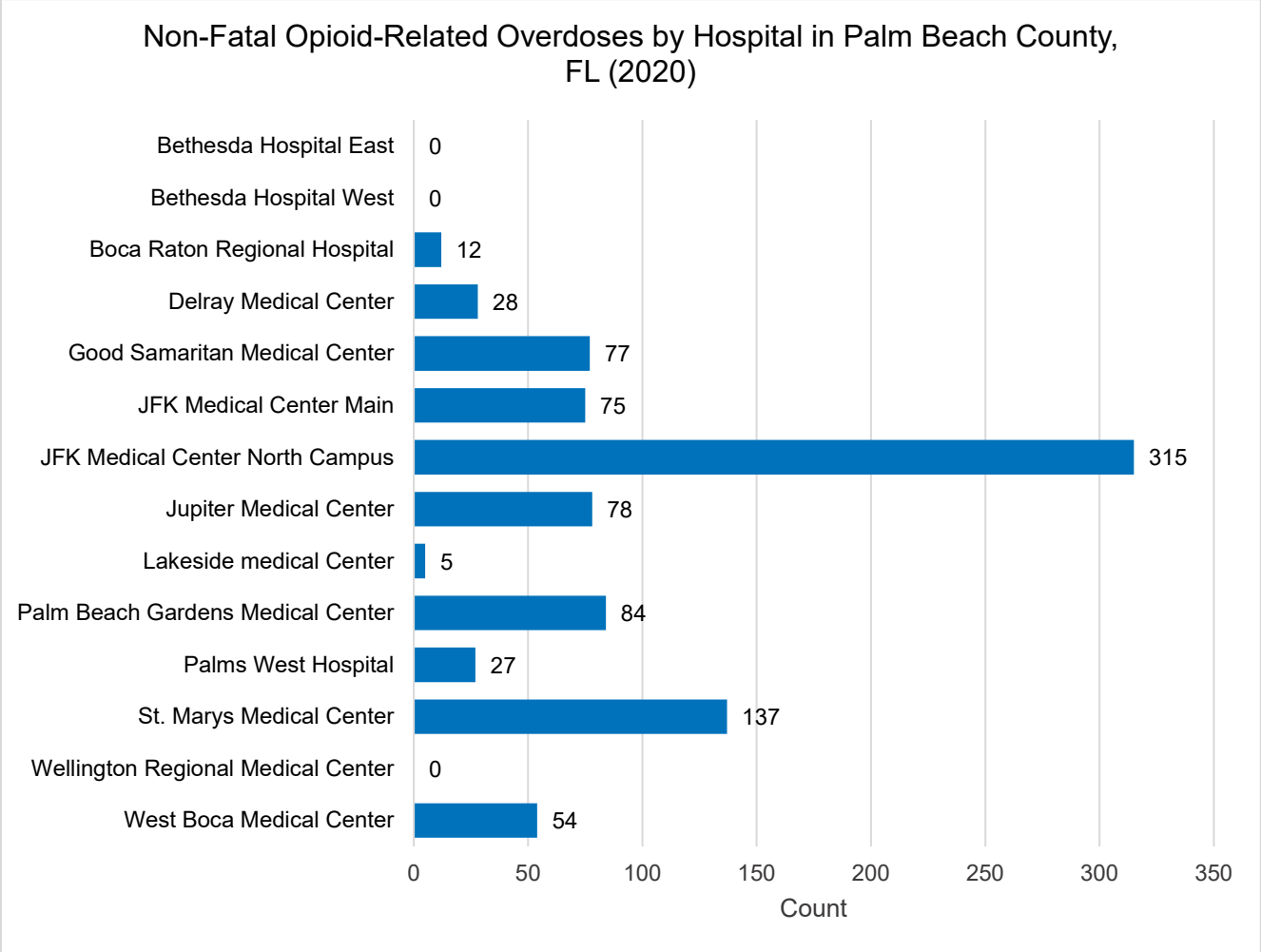
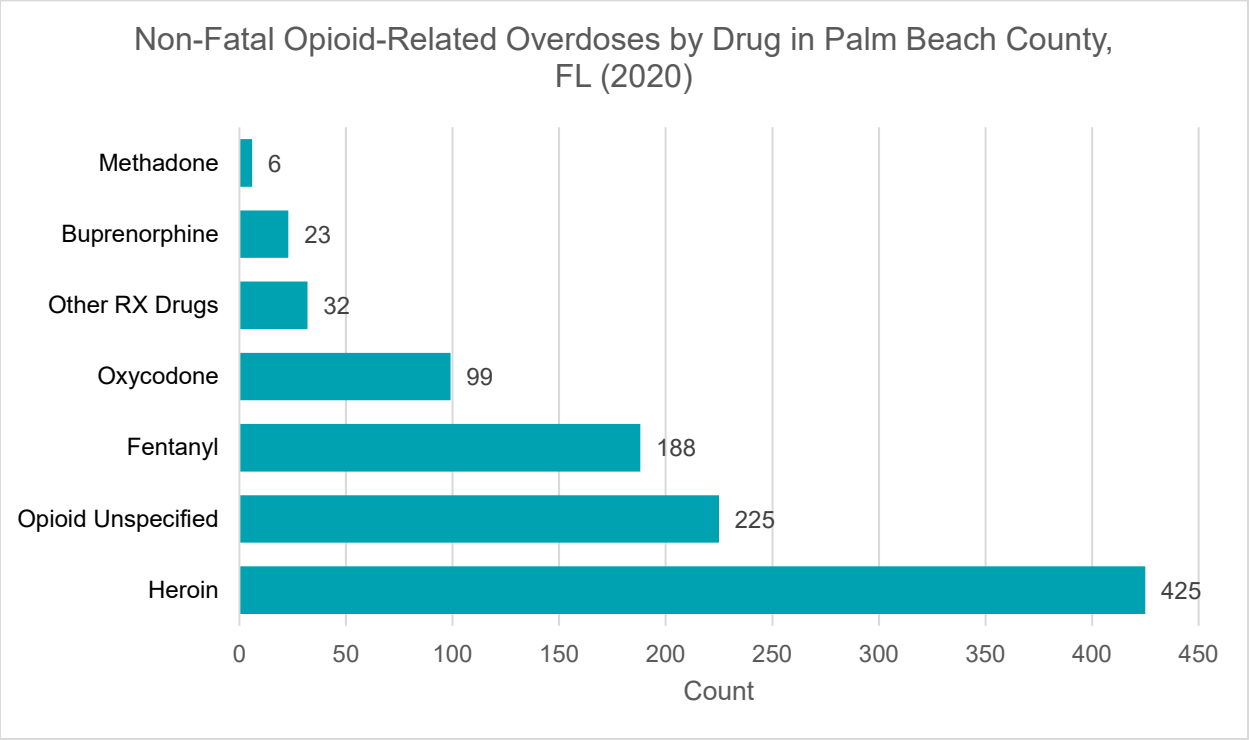


Figure 10

In the hospital medical records, drugs used prior to overdose were reported by the patient, clinician, or EMS. Heroin accounted for 42.6% of the reported drugs used prior to overdosing followed by opioid unspecified at 22.5%. Opioid unspecified was second highest as patients would sometimes report taking a non-opioid that they thought may have been laced with an opioid and then they would have a positive response to Narcan.



Opioid-Related Overdose Mortality

Decedent Demographics

Summary data for patient demographics and characteristics of opioid-related overdose mortality can be found in Table 5.

A total of 528 fatal opioid-related overdose records in 2020 were collected and reviewed. The average age of fatal opioid-related overdoses was 38.6 years (SD=12.2 years). Fatal overdoses were most prevalent among White (90.5%), Non-Hispanic (85.4%), males (76.5%). Of the 123 female decedents, 2.4% (N=3) were pregnant at time of death and 4.1% (N=5) were pregnant within one year of death. The age groups with the highest proportion of non-fatal overdoses occur among adults aged 25-34 (33.3%) and adults aged 35-44 (28.6%). No youths aged 14 years or younger were reported.

In 2020, the majority of decedents were PBC residents (85.4%). The usual occupation of decedents was most frequently workers in the hospitality/food and beverage industry, followed by workers in the construction industry, 15.2% and 14.8% respectively. Ten percent of decedents obtained a bachelor's degree or higher, and the majority (58.7%) had a high school diploma or less.

Instability in housing and criminal history were frequently among decedents who fatally overdosed. Homelessness was reported in 6.6% of cases. Residing in a hotel or motel was reported in 3.6% of cases. Other unstable housing situations occurred in 3.2% of cases. The majority of decedents had some form of criminal record history (70.0% vs 30.0% with no criminal record). Most crimes were drug-related (47.5%) such as drug possession and possession of drug paraphernalia. Decedents with a prior charge of driving under the influence (DUI) or driving while intoxicated (DWI) occurred in 19.9% of cases.

Decedent medical history included chronic pain (9.9%), hepatitis C (19.7%), HIV (0.6%) and other STDs (9.9%). Thirty percent of decedents had a known mental illness. The most prevalent mental illnesses were depression (19.3%) and anxiety (9.9%). Most decedents had a history of substance abuse (97.4%) and 34.1% had a history of IV drug use. The average age of decedents when substance abuse began was 20.6 years (SD=7.3 years). Participation in a past or current SUD treatment program was reported in 44.7% of patients.

Figure 11

In PBC, the highest proportion of fatal opioid-related overdoses was seen in males in the 25-34 age group while the 35-44 age group followed closely behind. For females, the highest proportion of overdoses was also in the 25-34 age group. For adults over the age of 65, the 65-74 age group had the most overdoses, with 69.2% of them being males. For children under the age of 15, there were no fatal opioid-related overdoses reported.

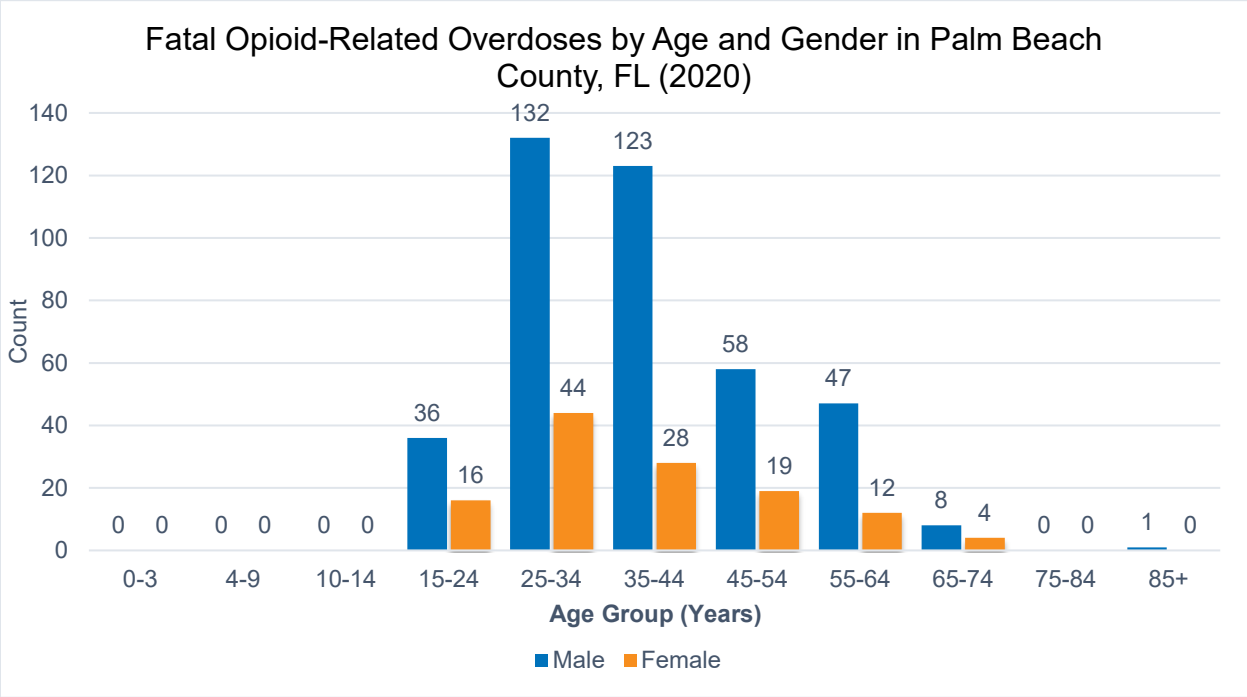
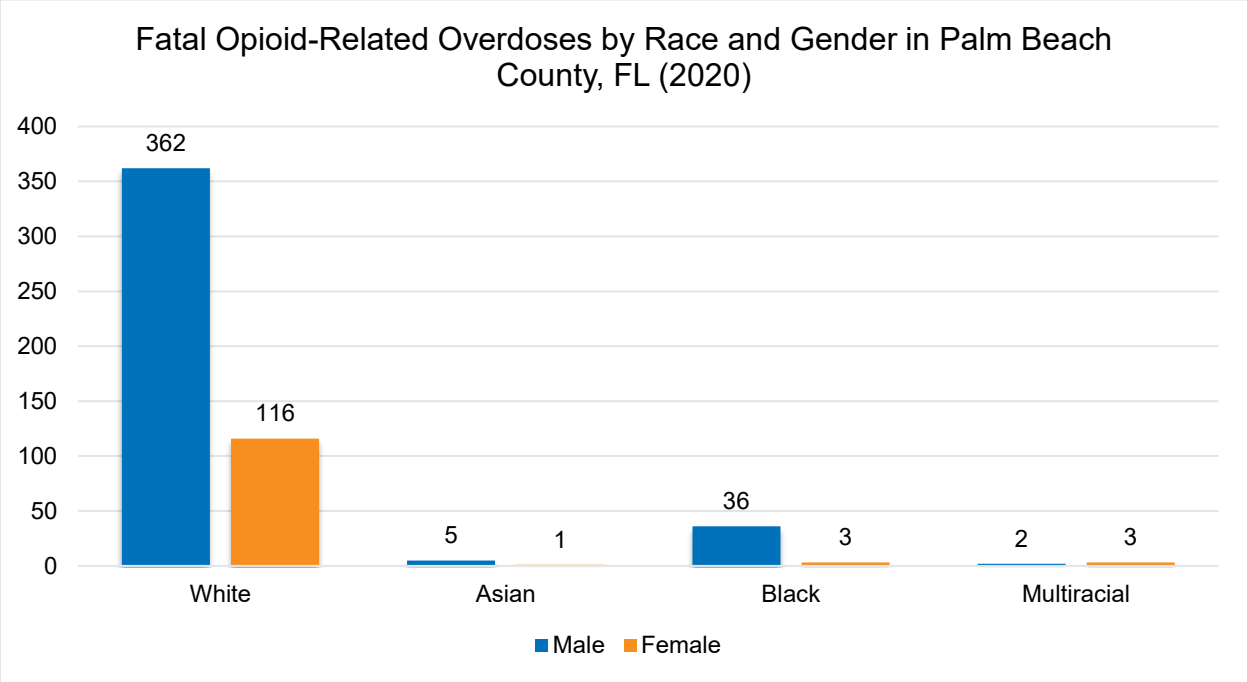


Figure 12

Fatal opioid-related overdose records show 68.6% were white males and 22.0% were white females. Asian and Multiracial individuals accounted for the lowest number of fatal overdoses with 1.1% and 0.9% respectively.



Overdose Incident Information

Summary data for opioid-related overdose incident information can be found in Table 6.

In 2020, the majority (94.3%) of fatal opioid-related overdoses had fentanyl reported as the type of opioid involved in the fatal overdose. Other opioids implicated included fentanyl analogs (24.8%) and heroin (11.0%). Cocaine was the highest used non-opioid (28.6%) in addition to the opioids. Other non-opioids involved were alcohol (17.2%) and a Benzodiazepine (12.7%). The primary cause of death was polysubstance toxicity with 70.6% and 28.8% only had a single substance. More than half (57.4%) of the fatal overdoses occurred at the decedent's home. Other fatal overdose locations included hotel/motel (9.9%) and other private residence (11.9%) like a friend or family's home. Additionally, 25.2% of decedents were provided with Narcan as a medical intervention and 23.9% required mechanical ventilation/intubation.

Figure 13

In 2020, there were 528 fatal opioid-related overdoses in PBC. There was an average of 44 fatal overdoses per month and 1.4 fatal overdoses per day. The largest decrease was in December with a 29.7% decrease and the peak occurred in February with a 44.0% increase from the previous month.

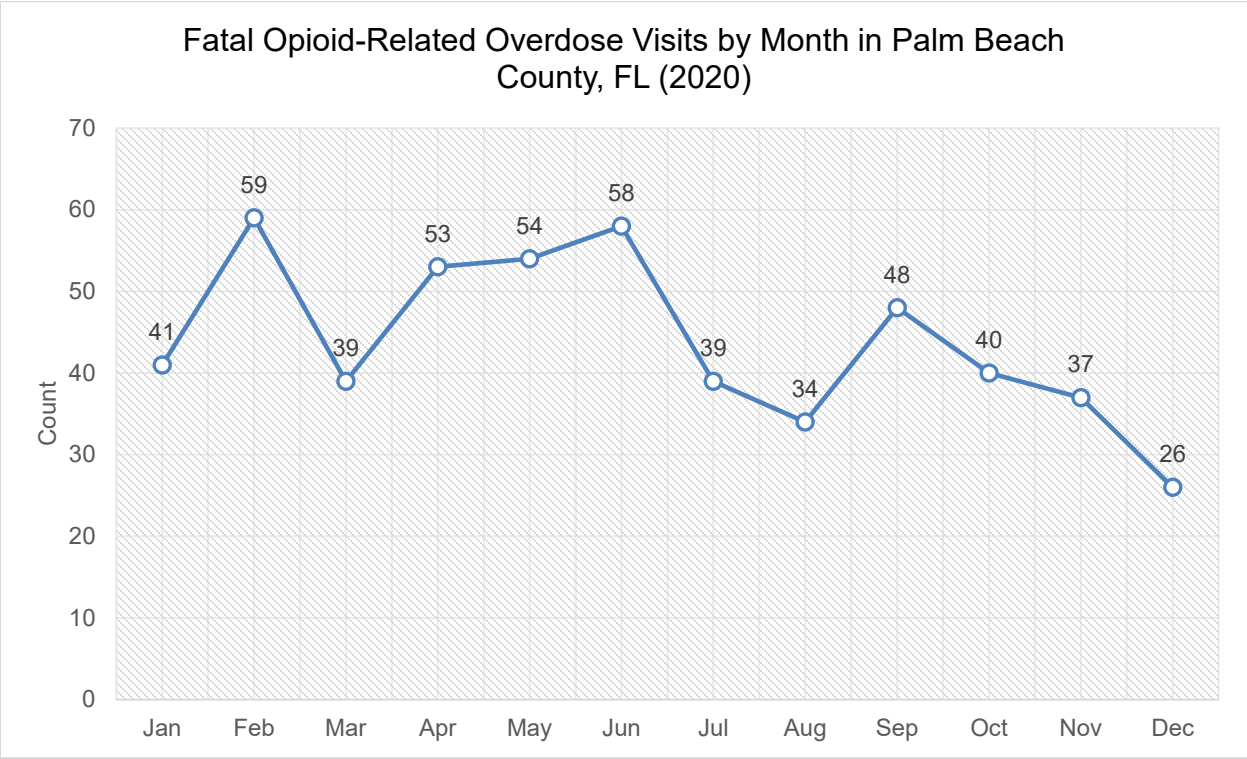


Figure 14

In 2020, the top three hospitals where patients were taken for their fatal opioid-related overdoses were JFK Medical Center North Campus (17.2%), Palm Beach Gardens Medical Center (14.8%), and Bethesda Hospital East (13.3%). On the other side of the county at Lakeside Medical Center, only 0.8% of fatal opioid-related overdoses were taken there. This was also the case for Bethesda Hospital West.

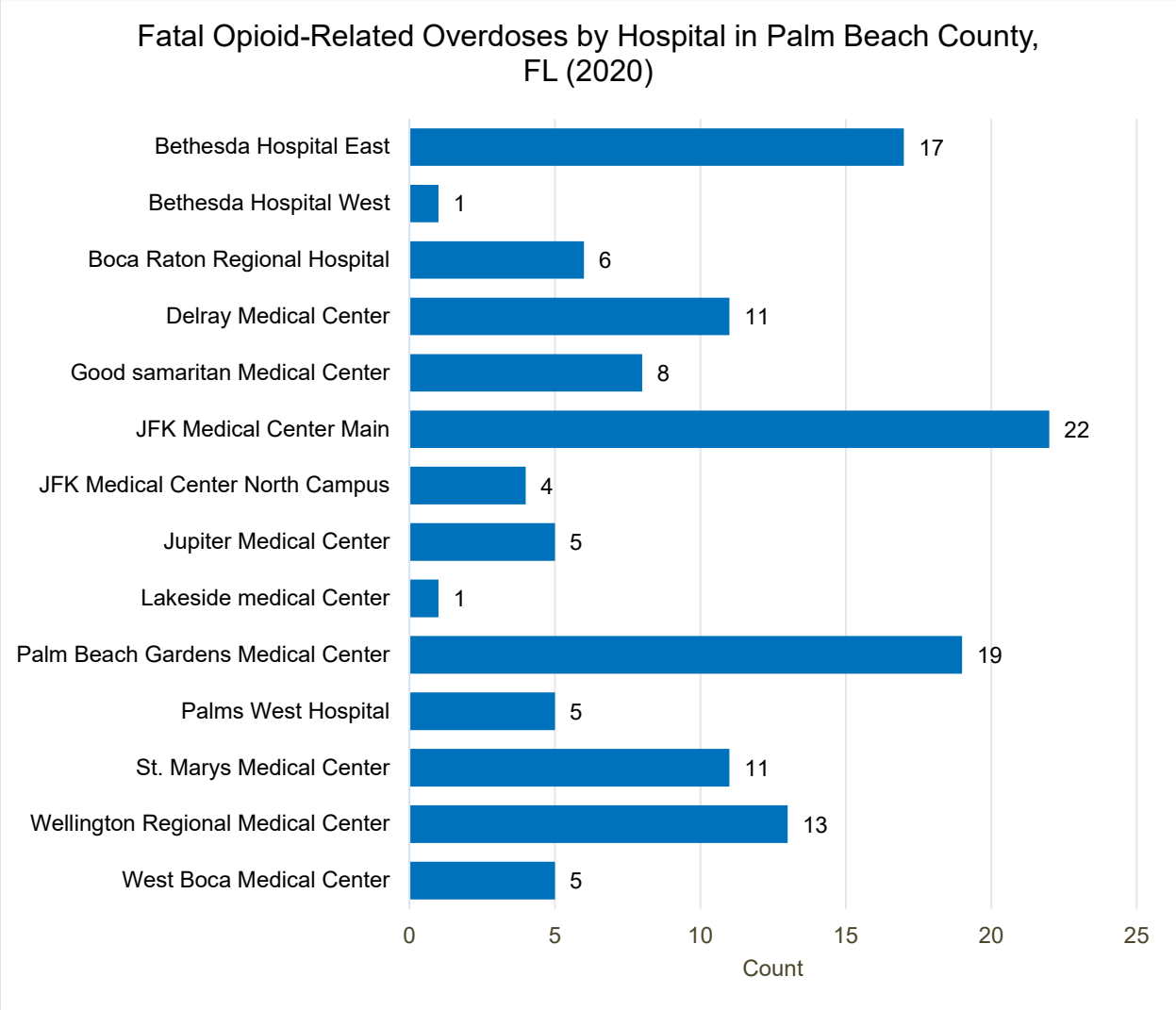


Figure 15

In PBC, fentanyl accounted for 94% of the single substances found in fatal opioid overdoses.

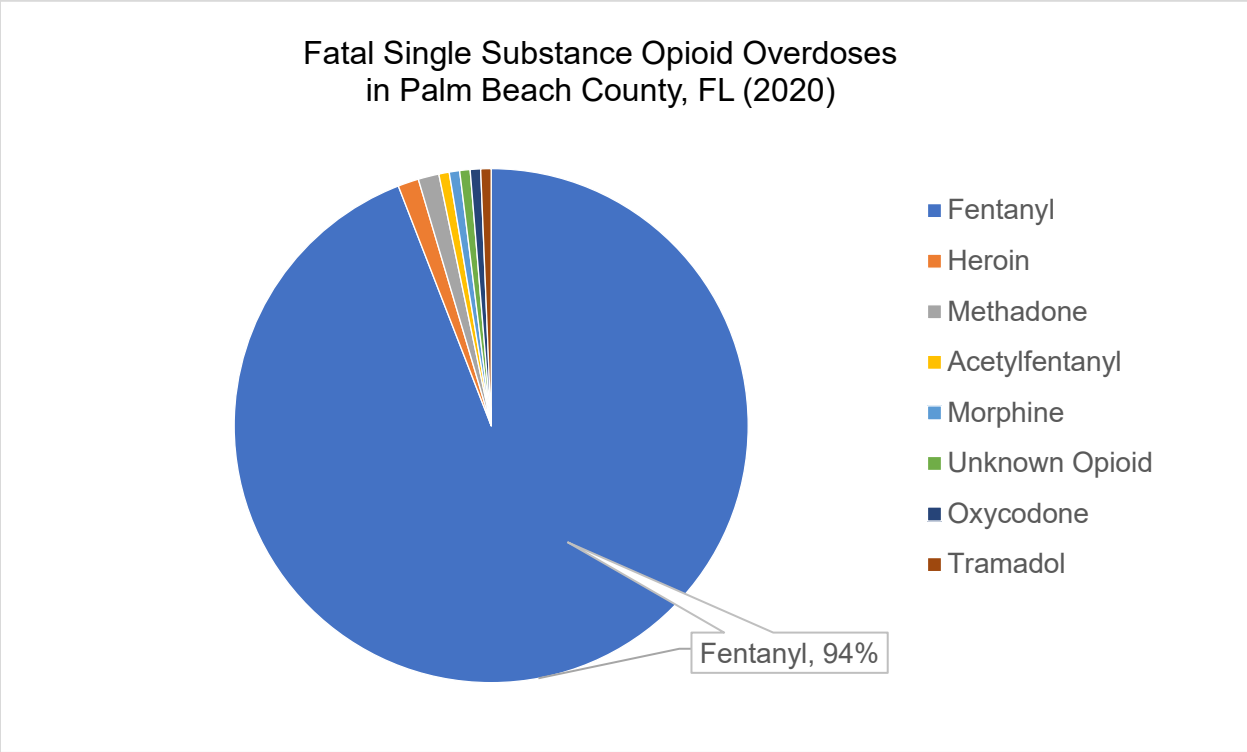


Figure 16

In PBC, 28.6% of the drugs found in the fatal opioid-related overdoses were a combination of fentanyl and a non-opioid. Following closely after at 27.5% was fentanyl alone. The majority of overdoses have a combination of two or more opioids. The combination with the highest number of drugs included fentanyl, fentanyl analog, heroin, another opioid, and a non-opioid and accounted for 0.4% of the fatal overdoses.

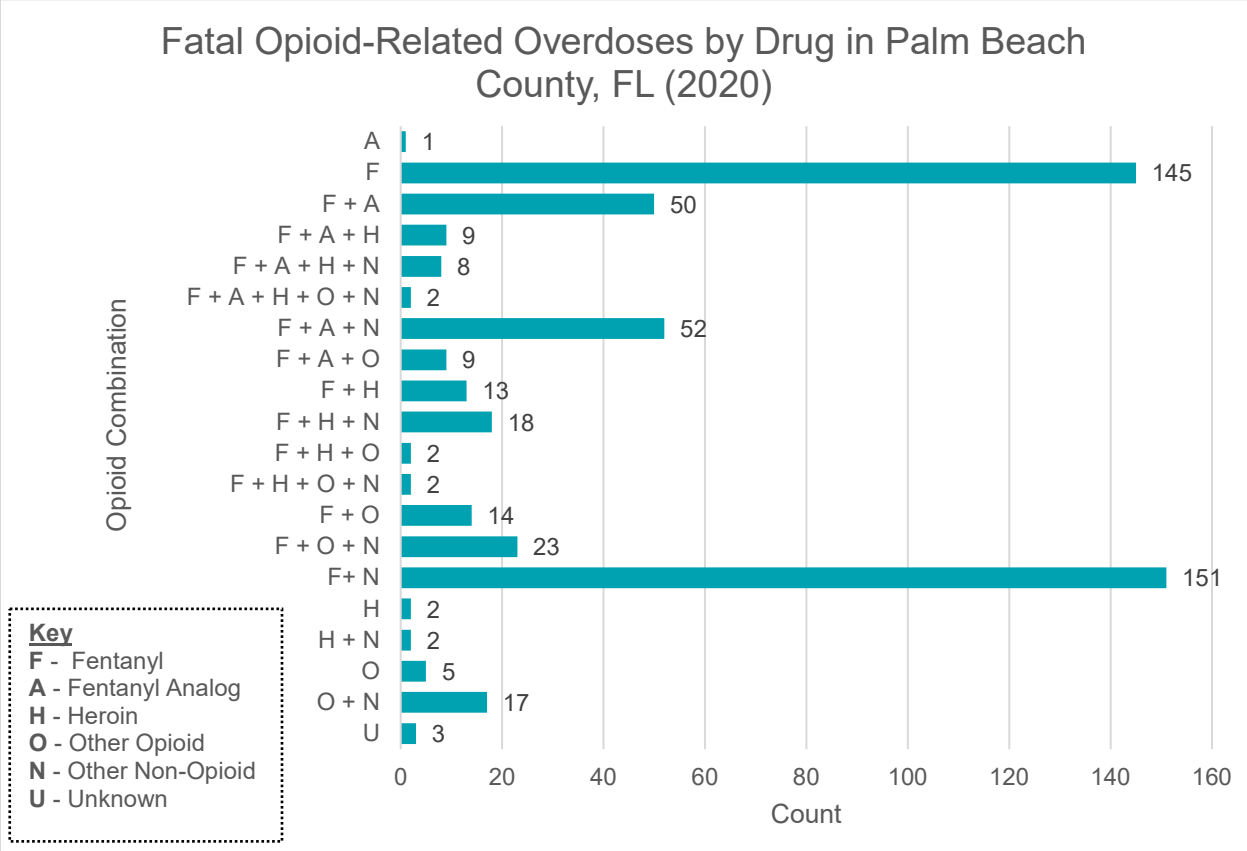


Figure 17

In 2020, the highest number of opioid-related deaths occurred in the months of February and June. The only month that had 26 deaths or less was in December. The remaining months varied from 27 to 54 deaths.

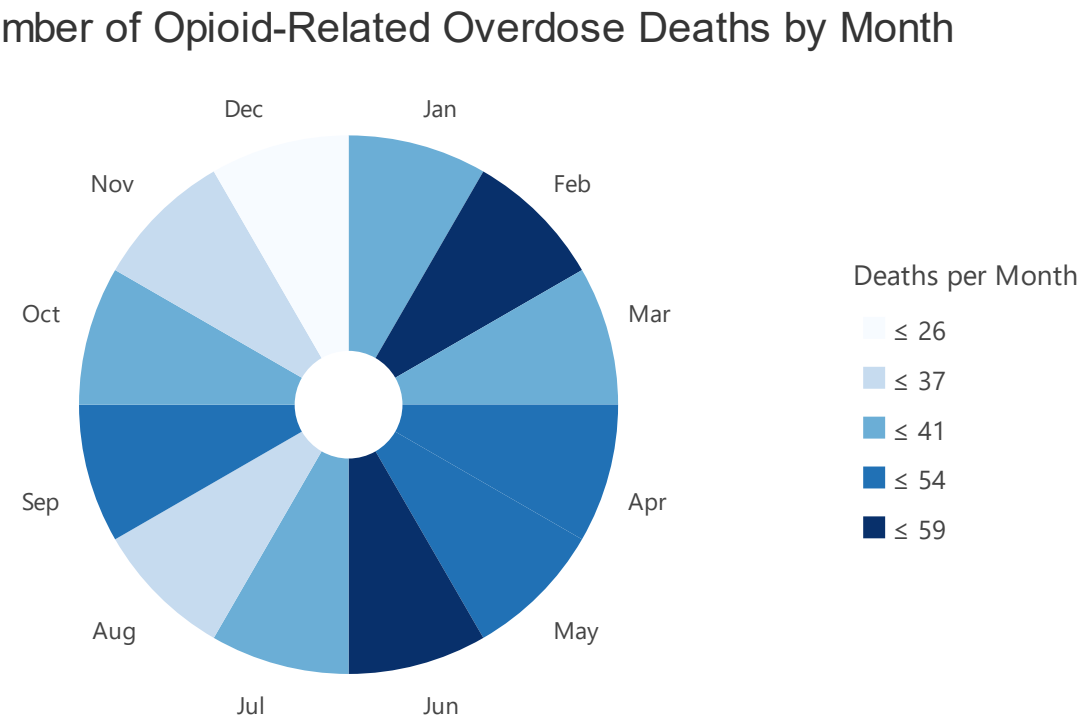
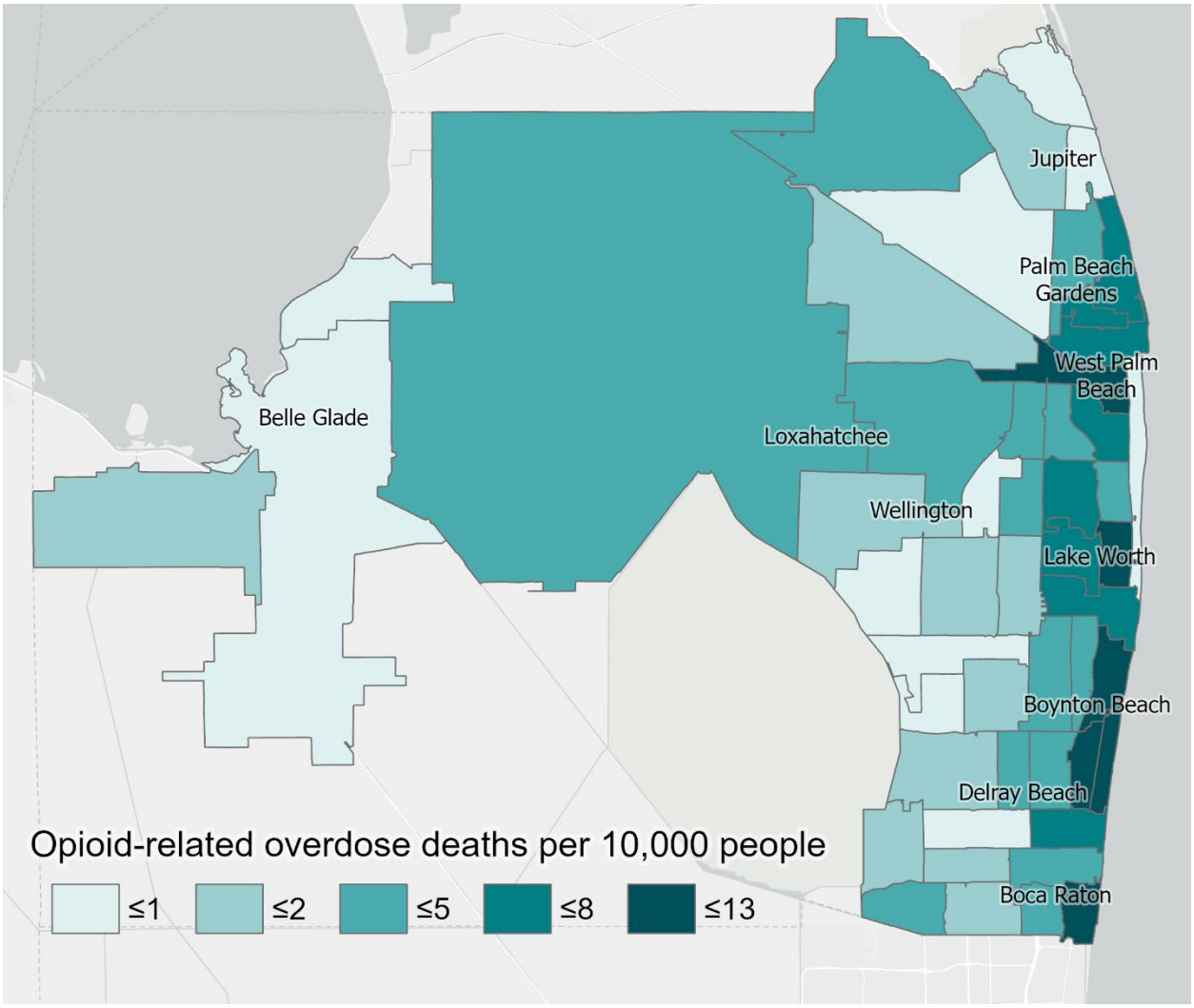


Figure 18

In PBC, the areas with the highest opioid-related deaths occurred in the east side of the county and included: West Palm Beach, Lake Worth, Boynton Beach, Delray Beach, and Boca Raton.



Discussion

The data presented in this report is an aggregation of multiple data sources with the purpose of providing a comprehensive holistic approach to drug overdose surveillance in Palm Beach County, FL. Comparison of overdose data from syndromic surveillance, medical records, and medical examiner records allowed us to gain new perspectives on opioid overdose morbidity and mortality.

The findings in key demographic areas such as age, race, and ethnicity were similar across the data sources. Overall, the largest age group affected were adults ages 25-34 followed by adults ages 35-44. Opioid-related overdose cases were mostly White, Non-Hispanic, and male. Population and age-adjusted rates of overdose were not included in this report but are needed to further quantify the relationship between demographics and opioid-related overdose. Temporal trends in opioid-related overdoses varied significantly across the data. Syndromic surveillance and non-fatal overdoses peaked in during summer months from June to September 2020, while overdose mortality peaked earlier in the year.

One important inconsistency among the data is among the report type of opioid overdose. Analysis of syndromic surveillance and non-fatal overdoses show heroin to be the most frequently reported opioid involved in overdoses, excluding unspecified opioids. Conversely, fatal overdose data shows that fentanyl was involved in the overwhelming majority of opioid-related overdose deaths with heroin playing a much smaller role overall. The discrepancies between non-fatal and fatal overdoses could be attributed to many different factors. For example, hospital staff might make assumptions or generalizations based on their expectations or experiences in treating overdoses and record the incident as such. Other sources of discrepancies could arise from the patient not fully being aware of the substance ingested. Fatal overdoses undergo extensive toxicology testing for an exceptionally large number of substances compared to standard hospital toxicology. Consequentially, the opioid reported in syndromic and non-fatal data are qualitatively assessed, while fatal overdose data was able to be quantitatively assessed and thus presumably can provide a more accurate representation of types of opioid involved in drug overdoses. Finally, the discrepancy between non-fatal overdoses and fatal overdoses could be accounted by the overall result of the overdose. Fentanyl and fentanyl analogs are significantly more lethal than other opioids like heroin and oxycodone[1]. Thus, the discrepancy could potentially be the result of survivorship bias. Further investigation into the chemical composition of drugs, particularly illicitly manufactured drugs, is needed to provide further clarification on the matter.

The Florida Department of Health in Palm Beach County looks forward to continuing to improve surveillance measures and provide innovative solutions for the new wave in this drug overdose epidemic.

Tables

Table 1. Participating hospitals for ED overdose medical record collection and date FDOH began record collection

Name of Hospital	Name of City	Hospital Start Date
JFK Medical Center North	West Palm Beach	April 24th, 2020
Palms West Hospital	Loxahatchee	May 15th, 2020
Lakeside Medical Center	Belle Glade	May 22nd, 2020
Jupiter Medical Center	Jupiter	June 2nd, 2020
Delray Medical Center	Delray Beach	June 19th, 2020
West Boca Medical Center	Boca Raton	June 19th, 2020
St. Mary's Medical Center	West Palm Beach	June 19th, 2020
Good Samaritan Medical Center	West Palm Beach	June 19th, 2020
Palm Beach Gardens Medical Center	Palm Beach Gardens	June 19th, 2020
JFK Main	Atlantis	December 9th, 2020
Boca Raton Regional Hospital	Boca Raton	January 19th, 2021

Table 2. Database accessed for patient information

Database	Information Obtained
Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)	Hospital ED visits. This information is de-identified and categorized into syndrome groups by chief complaints and ICD-10-CM codes.
LexisNexis- Accurint	Criminal record history, addresses, driver license issue state
Merlin	All reportable diseases/conditions in Florida (e.g. viral hepatitis, COVID-19)
Surveillance Tools and Reporting System (STARS)	HIV and other STDs

Vital Statistics Search	Death certificates

Table 3. Patient demographics for non-fatal opioid related overdoses in 2020

Variable	Frequency	Percent
Sex		
Female	291	32.62%
Male	601	67.38%
Pregnancy Status		
Not pregnant at time of overdose	208	23.32%
Pregnant at time of overdose	10	1.12%
Unknown pregnancy status	73	8.18%
Race		
American Indian/ Alaskan Native	1	0.11%
Asian	2	0.22%
Black	96	10.76%
Other	25	2.80%
White	764	85.65%
Unknown	4	0.45%
Ethnicity		
Hispanic	61	6.84%
Non-Hispanic	679	76.12%
Unknown	152	17.04%
Age (years)		
mean (SD), range (min,max)	*38.61 (13.38)*	*96(0 ,96)*
0 - 3	3	0.34%
4 - 9	1	0.11%
10 - 14	0	0.00%
15 - 24	75	8.41%
25 - 34	345	38.68%
35 - 44	226	25.34%
45 - 54	106	11.88%
55 - 64	91	10.20%
65 - 74	38	4.26%
75 - 84	5	0.56%
85+	2	0.22%
Employment Status		
Disabled	48	5.38%
Employed	181	20.29%
Minor (<18 years)	6	0.67%
Retired	36	4.04%
Student	10	1.12%
Unemployed	407	45.63%
Unknown	204	22.87%

(Continued)	**Frequency**	**Percent**
Primary Insurance		
Private insurance	143	16.03%
Medicaid	87	9.75%
Medicare	77	8.63%
Military	9	1.01%
District Cares*	18	2.02%
Uninsured, Medicaid/District Cares pending	214	23.99%
Uninsured, no insurance pending	273	30.61%
Unknown	71	7.96%
Housing Type		
Private residence	591	66.26%
Homeless/homeless shelter	80	8.97%
Hotel/Motel	13	1.46%
Institutionalized housing*	9	1.00%
Recovery facility/sober housing	78	8.74%
Other unstable housing*	116	1.30%
Unknown	5	0.56%
Criminal Record History		
No criminal record history	192	21.52%
Criminal record history (any)	700	78.48%
Drug crimes (any)	474	53.14%
DUI/DWI	169	18.95%
Disorderly conduct	173	19.40%
Violent crimes	297	33.30%
Theft and fraud	440	49.33%
Child endangerment	33	3.70%
Prostitution	51	5.72%
Other criminal history	413	46.30%
Past Medical History		
Chronic Pain	155	17.38%
Insomnia	12	1.35%
MRSA	8	0.90%
Hepatitis A	6	0.67%
Hepatitis B	31	3.48%
Hepatitis C	333	37.33%
HIV	25	2.80%
STDs	120	13.45%

(Continued)	**Frequency**	**Percent**
Mental health history (any)	304	34.08%
ADHD	18	2.02%
Anxiety	176	19.73%
Bipolar disorder	60	6.73%
Depression	219	24.55%
Eating disorder/body dysmorphia	4	0.45%
Personality disorder	2	0.22%
PTSD	28	3.14%
Schizophrenia	17	1.91%
Unspecified mental illness	8	0.90%
Known mental health hospitalizations	108	12.11%
Known suicide attempts	69	7.74%
Narcotic Prescription Medication	174	19.51%
Number of Prescriptions, mean (SD)	*1.25 (0.49)*	
Codeine	5	0.56%
Fentanyl	3	0.34%
Hydrocodone	5	0.56%
Hydromorphone	6	0.67%
Methadone	7	0.78%
Morphine	15	1.68%
Oxycodone	85	9.53%
Buprenorphine	12	1.35%
Buprenorphine-Naloxone (Suboxone)	32	3.59%
Tramadol	17	1.91%
Diphenoxylate	2	0.22%
Unspecified prescription narcotic	9	1.01%
Non-Narcotic Controlled Substance Medications	137	15.36%
Number of Prescriptions, mean (SD)	*1.43 (0.67)*	
Benzodiazepine	94	10.54%
Stimulants	17	1.91%
Nonbenzodiazepine sedatives	17	1.91%
Barbiturate	2	0.22%
Muscle relaxants	3	0.34%
Anticonvulsants	7	0.78%
Substance Use History		
History of substance abuse	735	82.40%
IV drug use	270	30.27%
Prior overdose reported	239	26.79%

(Continued)	**Frequency**	**Percent**
SUD Treatment History		
SUD treatment (any)	334	34.44%
Drug treatment facility	261	29.26%
Buprenorphine-based	107	12.00%
Methadone	13	1.46%
Naltrexone	2	0.22%

Table 4. Overdose incident information for non-fatal overdoses in 2020.

Variable	Frequency	Percent
Type of Opioid Overdose		
Heroin	425	47.65%
Fentanyl	188	21.08%
Oxycodone	99	11.10%
Methadone	6	0.67%
Buprenorphine	23	2.58%
Other prescription narcotics	32	3.59%
Unspecified opioid	225	25.22%
Opioid Route of Administration		
Oral	119	13.34%
Intravenous (IV)	154	17.26%
Smoke	37	4.15%
Insufflation	194	21.75%
Transdermal	6	0.67%
Unknown route	399	44.73%
Polysubstance Overdose		
Opioid only	550	61.66%
Opioid + non-opioid	342	38.34%
Opioid + non-opioid (alcohol excluded)	217	24.33%
Non-Opioid Substances Involved		
Alcohol	125	14.01%
Amphetamine	12	1.35%
Methamphetamine	6	0.67%
Benzodiazepines	106	11.88%
Barbiturates	3	0.34%
Cocaine	116	13.00%
Marijuana	34	3.81%
Phencyclidine (PCP)	0	0.00%
Gabapentin	4	0.45%
GHB	2	0.22%
LSD/hallucinogen	1	0.11%
Kratom	1	0.11%
Muscle relaxant	4	0.45%
Other medication*	31	3.48%
Contributing Factors of Drug Use Reported		
Contributing factor (any)	173	19.39%
Recent stress	29	3.25%
Depression/mental health	43	4.82%
Lack/loss of access to SUD treatment	14	1.57%
Family/relationship problems	23	2.58%

(Continued)	**Frequency**	**Percent**
Loss of a loved one	15	1.68%
Chronic pain	49	5.49%
Wanting to try/experimenting	20	2.24%
Overdose Signs/Symptoms		
Pinpoint pupils	194	21.75%
Decreased responsiveness/somnolence	400	44.84%
Loss of consciousness	620	69.51%
Respiratory depression/hypoxia	285	31.95%
Cold/blue skin, lips, or fingernails	56	6.28%
Gurgling or choking sounds	5	0.56%
Nausea, vomiting, diaphoretic	48	5.38%
Seizure	18	2.02%
Tachycardia	104	11.66%
Altered mental status	328	36.77%
Hospital Where Treated		
Boca Raton Regional Hospital	12	1.35%
Delray Medical Center	28	3.14%
Good Samaritan Medical Center	77	8.63%
JFK Medical Center - Main Campus	75	8.41%
JFK Medical Center - North Campus	315	35.31%
Jupiter Medical Center	78	8.74%
Lakeside Medical Center	5	0.56%
Palm Beach Gardens Medical Center	84	9.42%
Palms West Hospital	27	3.03%
St. Mary's Medical Center	137	15.36%
West Boca Medical Center	54	6.05%
Mode of Transportation to Hospital		
EMS/fire rescue	786	88.12%
Police	15	1.68%
Private vehicle/walk-in	69	7.74%
Overdosed while in the hospital	3	0.34%
Unknown	19	2.13%
Type of Care Received		
Inpatient	276	30.94%
Outpatient	616	69.06%
Known Overdose ED Readmissions During 2020		
No known ER readmissions/ 1 known overdose	677	75.90%
1 readmission/ 2 overdoses total	66	7.40%
2 readmissions/ 3 overdoses total	23	2.58%
3 readmissions/ 4 overdoses total	2	0.22%
4 readmissions/ 5 overdoses total	0	0.00%
5 readmissions/ 6 overdoses total	1	0.11%

(Continued)	**Frequency**	**Percent**
Narcan Administration		
No Narcan given	216	24.22%
Single dose given	489	54.82%
Multiple doses given	159	17.83%
Unknown	28	3.14%
Administered 1st Dose of Narcan		
EMS/fire rescue	437	48.99%
Police	8	0.90%
Hospital staff	136	15.25%
Bystander/other	48	5.38%
Unknown administrator	19	2.13%
Administered 2nd Dose of Narcan		
EMS/fire rescue	52	5.83%
Police	2	0.22%
Hospital staff	99	11.10%
Bystander/other	4	2.52%
Unknown administrator	2	1.26%
Complications of Overdose		
complication (any)	244	27.35%
Acidosis	15	1.68%
Acute kidney injury/kidney failure	31	3.48%
Aspiration pneumonia	60	6.73%
Cardiac arrest	10	1.12%
Encephalopathy	17	1.91%
Pneumonia, unspecified	17	1.91%
Rhabdomyolysis	36	4.04%
Sepsis	48	5.38%
Respiratory failure	51	5.72%
Required intubation	46	5.16%
Other organ failure	16	1.79%
Reported Toxicological Findings		
Standard urine toxicology reported	298	33.41%
Blood alcohol level reported	433	48.54%
Fentanyl testing	10	1.12%
Positive Toxicology		
Amphetamines	47	5.27%
Barbiturates	9	1.01%
Benzodiazepines	119	13.34%
Cocaine	153	17.15%
Opiates	87	9.75%
Cannabis	102	11.43%
Methadone	7	0.78%

(Continued)	**Frequency**	**Percent**
Phencyclidine (PCP)	1	0.11%
Fentanyl	10	1.12%
Blood Alcohol	89	9.98%
Blood alcohol level, mean (SD)	*128.84 (88.73)*	*419.90 (10.10,430.00)*

Table 5. Demographics of fatal overdoses in 2020

Variable	Frequency	Percent
Sex		
Female	123	23.30%
Male	404	76.52%
Transgender Female	0	0.00%
Transgender Male	1	0.19%
Pregnancy Status		
Not pregnant at time of death	34	6.44%
Pregnant at time of death	3	0.57%
Pregnant within 42 days of death	2	0.38%
Pregnant 43 days to 1 year of death	3	0.57%
Unknown if pregnant within 1 year of death	82	15.53%
Race		
White	478	90.53%
Black	39	7.39%
Asian	6	1.14%
Multiracial	5	0.95%
Ethnicity		
Hispanic (any)	59	11.17%
Chilean	1	0.19%
Colombian	3	0.57%
Cuban	13	2.46%
Dominican	3	0.57%
Granada	1	0.19%
Guatemalan	2	0.38%
Honduran	1	0.19%
Mexican	10	1.89%
Puerto Rican	17	3.22%
Spaniard	1	0.19%
Hispanic, unspecified	7	1.33%
Other, Brazilian	1	0.19%
Other, Haitian	1	0.19%
Other, West Indian	1	0.19%
Multiethnic	2	0.38%
Non-Hispanic/Haitian origin	451	85.42%
Unknown ethnicity	13	2.46%

(Continued)	**Frequency**	**Percent**
Age (years)		
mean (SD), range (min,max)	*38.58 (12.17)*	*65 (16,81)*
0 - 3	0	0.00%
4 - 9	0	0.00%
10 - 14	0	0.00%
15 - 24	52	9.85%
25 - 34	176	33.33%
35 - 44	151	28.60%
45 - 54	77	14.58%
55 - 64	59	11.17%
65 - 74	12	2.27%
75 - 84	1	0.19%
85+	0	0.00%
Florida Residency		
Florida resident, Palm Beach County	451	85.42%
Florida resident, out of county	29	5.49%
Non-Florida residency	48	9.09%
Driver's License Issued State		
Florida	434	82.20%
New York	8	1.52%
Massachusetts	7	1.33%
North Carolina	7	1.33%
Tennessee	5	0.95%
Illinois	4	0.76%
Maryland	4	0.76%
New Jersey	4	0.76%
Ohio	4	0.76%
Texas	4	0.76%
Other state	21	3.98%
Unknown/no license issued	26	4.92%
Usual Occupation Industry		
Animal welfare	8	1.52%
Art/Music	9	1.70%
Automotive	27	5.11%
Business/finance	13	2.46%
Construction	78	14.77%
Education	21	3.98%
Electrical/plumbing	17	3.22%
Farming/agriculture/landscaping	23	4.36%
First responder	4	0.76%
Healthcare	26	4.92%

(Continued)	Frequency	Percent
Hospitality/food and beverage	80	15.15%
HVAC	7	1.33%
Maintenance/repair	15	2.84%
Marine services	8	1.52%
Real estate	7	1.33%
Retail/sales	69	13.07%
Never worked	21	3.98%
Disabled	4	76.00%
Other	65	12.31%
Unknown occupation	26	4.92%
Education		
8th grade or less	11	2.08%
9th-12th grade	52	9.85%
High school graduate/GED completed	247	46.78%
Some college, no degree	97	18.37%
Associate degree	47	8.90%
Bachelor's degree	47	8.90%
Master's degree	0	0.00%
Doctoral or professional degree	6	1.14%
Unknown	21	3.98%
Veteran Status		
U.S. armed forces	21	3.98%
Living Situation		
Private residence	370	70.08%
Homeless/homeless shelter	35	6.63%
Hotel/motel	19	3.60%
Institutionalized housing*	4	0.76%
Recovery facility/sober housing	39	7.39%
Other unstable housing*	17	3.22%
Unknown	44	8.33%
Criminal Record / Legal History		
No criminal record history	159	30.11%
Criminal record history (any)	369	69.89%
Drug crimes (any)	251	47.54%
Drug possession	226	42.80%
Drug paraphernalia possession	148	28.03%
Possession with intent to distribute	68	12.88%
DUI/DWI	105	19.89%
Disorderly Conduct	68	12.88%
Violent Crimes	135	25.57%
Theft and fraud	204	38.64%
Child Endangerment Crimes	17	3.22%

(Continued)	**Frequency**	**Percent**
Prostitution Crimes	8	1.52%
Past Medical History		
Shingles	2	0.38%
MRSA	6	1.14%
Hepatitis A	0	0.00%
Hepatitis B	7	1.33%
Hepatitis C	104	19.70%
HIV	3	0.57%
STDs	52	9.85%
Cancer	12	2.27%
Chronic Pain	52	9.85%
Insomnia	7	1.33%
Hypertension	68	12.88%
Diabetes	27	5.11%
Overweight (BMI ≥25)	321	60.80%
Obese (BMI ≥30)	165	31.25%
Body mass index (BMI), mean (SD)	*27.73 (6.51)*	
Mental Health History		
Mental health history (any)	159	30.11%
ADHD	15	2.84%
Anxiety	52	9.85%
Bipolar Disorder	41	7.77%
Depression	102	19.32%
Personality Disorder	1	0.19%
Eating Disorder/Body Dysmorphia	3	0.57%
PTSD	7	1.33%
Schizophrenia	10	1.89%
Unspecified Mental Illness	7	1.33%
Prescribed Narcotics (any)	52	9.85%
Number of Prescription Narcotics, mean (SD)	*1.15 (0.46)*	
Buprenorphine/Suboxone	18	3.41%
Dilaudid	1	0.19%
Fentanyl patch	2	0.38%
Hydromorphone	2	0.38%
Hydrocodone	1	0.19%
Methadone	4	0.76%
Morphine	3	0.57%
Oxycodone	20	3.79%
Tramadol	6	1.14%
Prescribed Non-narcotic Controlled Substance (any)	67	12.69%
Number of Non-narcotic Controlled Substances, mean (SD)	*1.42 (0.68)*	
Anabolic steroids/testosterone	6	1.14%

(Continued)	**Frequency**	**Percent**
Anticonvulsant	4	0.76%
Stimulant	22	4.17%
Barbiturate	2	0.38%
Benzodiazepine	47	8.90%
Medical Marijuana	1	0.19%
Muscle relaxant	1	0.19%
Nonbenzodiazepine sedative	6	1.14%
Non-Controlled Prescribed Medication		
Non-controlled anticonvulsants (any)	46	9.09%
Gabapentin	34	6.44%
Other anticonvulsant	20	3.79%
Muscle Relaxers	18	3.41%
Antidepressants	72	13.64%
Antipsychotics	33	6.25%
Substance Abuse History		
Age (years) when substance abuse started, mean (SD)	*20.6(7.3)*	
History of substance abuse	514	97.35%
Prior non-fatal overdose	98	18.56%
IV drug use	180	34.09%
Prior SUD treatment	236	44.70%

Table 6. Incident information for opioid overdoses in 2020.

Variable	Frequency	Percent
Primary Cause of Death		
Single substance toxicity	152	28.79%
Polysubstance toxicity	373	70.64%
Complication/sequelae of drug intoxication	3	0.57%
Number of Substances Listed as Cause of Death		
1	153	28.98%
2	186	35.23%
3	121	22.92%
4	48	9.09%
5	17	3.22%
6	2	0.38%
7	1	0.19%
Opioids Involved in Overdose		
Buprenorphine	5	0.95%
Codeine	1	0.19%
Fentanyl	498	94.32%
Fentanyl analogs*	131	24.81%
Heroin	58	10.98%
Hydrocodone	4	0.76%
Hydromorphone	2	0.38%
Methadone	14	2.65%
Morphine	16	3.03%
Oxycodone	36	6.82%
Tramadol	4	0.76%
Unknown opioid	3	0.57%
Non-Opioids Involved in Overdose		
Acetaminophen	1	0.19%
Alcohol	91	17.23%
Amphetamine	22	4.17%
Anticonvulsants	5	0.95%
Antidepressant	11	2.08%
Antihistamine	11	2.08%
Barbiturate	1	0.19%
Benzodiazepine	67	12.69%
Cocaine/metabolite	151	28.60%
Dextromethorphan	2	0.38%
Ketamine	1	0.19%
Kratom	8	1.52%
Nonbenzodiazepine Sedative	3	0.57%
Novel psychoactive substance	2	0.38%
MDMA	4	0.76%

Methamphetamine	8	1.52%
(Continued)	**Freq.**	**Percent**
Muscle Relaxant	9	1.70%
Combination of Drugs Listed as Cause of Death		
Fentanyl	144	2727.00 %
Fentanyl + fentanyl analog	50	947.00 %
Fentanyl + fentanyl analog + heroin	9	170.00 %
Fentanyl + fentanyl analog + heroin + other non-opioid	8	152.00 %
Fentanyl + fentanyl analog + heroin + other opioid + other non-opioid	2	38.00%
Fentanyl + fentanyl analog + other non-opioid	52	985.00 %
Fentanyl + fentanyl analog + other opioid	9	170.00 %
Fentanyl + heroin	13	246.00 %
Fentanyl + heroin + other opioid	2	38.00%
Fentanyl + heroin + other opioid + other non-opioid	2	38.00%
Fentanyl + heroin + other non-opioid	18	341.00 %
Fentanyl + other opioid	14	265.00 %
Fentanyl + other opioid + other non-opioid	23	436.00 %
Fentanyl + other non-opioid	152	2879.00 %
Fentanyl analog	1	19.00%
Heroin	2	38.00%
Heroin + Other non-opioid	2	38.00%
Other opioid	5	95.00%
Other opioid + Other non-opioid	17	322.00 %
Unknown	3	57.00%
Medical Interventions Provided		
CPR	111	21.02%
Narcan	133	25.19%
Epinephrine	6	114.00 %
Mechanical ventilation/intubation	126	23.86%
Overdose Location Setting		
Airbnb	4	0.76%
Airport	1	0.19%
Business	13	2.46%

Drug treatment facility	28	5.30%
(Continued)	**Freq**	**Percent**
Gas station	10	1.89%
Home	303	57.39%
Hospital	2	0.38%
Hotel/motel	52	9.85%
Jail	3	0.57%
Other private residence	63	11.93%
Restaurant/bar	9	1.70%
School	1	0.19%
Street/other outdoor setting	34	6.44%
Vacant house/building	5	0.95%
Motor Vehicle Involvement		
Overdosed occurred in a motor vehicle	30	5.68%
Place of Death		
Hospital setting	121	22.92%
Dead on arrival	9	1.70%
Emergency room/outpatient	77	14.58%
Inpatient	35	6.63%
Non-hospital setting	407	77.08%
Decedent's residence	252	47.73%
Hospice facility	7	1.33%
Other	148	28.03%
Hospital		
Bethesda Hospital East	17	3.22%
Bethesda Hospital West	1	0.19%
Boca Raton Regional Hospital	6	1.14%
Delray Medical Center	11	2.08%
Good Samaritan Medical Center	8	1.52%
JFK Medical Center Main	28	5.30%
JFK Medical Center North Campus	4	0.76%
Lakeside medical Center	1	0.19%
Palm Beach Gardens Medical Center	19	3.60%
Palms West Hospital	5	0.95%
St. Mary’s Medical Center	11	2.08%
Wellington Regional Medical Center	13	2.46%
West Boca Medical Center	5	0.95%
Manner of death		
Accident	521	98.67%
Suicide	6	1.14%
Undetermined	1	0.19%
Toxicology		
Volatiles	154	29.17%
Amphetamines (any)	68	12.88%
Amphetamine	58	10.98%

Methamphetamine	25	4.73%
(Continued)	**Freq**	**Percent**
MDMA	5	0.95%
Analgesics (any)	57	10.80%
Anesthetics (any)	6	1.14%
Ketamine	2	0.38%
Anticonvulsants (any)	88	16.67%
Gabapentin	71	13.45%
Levetiracetam	10	1.89%
Antidepressants (any)	113	21.40%
Antihistamines (any)	55	10.42%
Antipsychotics (any)	26	4.92%
Barbiturates (any)	3	0.57%
Benzodiazepines (any)	214	40.53%
7-Amino Clonazepam	59	11.17%
α-OH-alprazolam	114	21.59%
Alprazolam	119	22.54%
Chlordiazepoxide	5	0.95%
Clonazepam	7	1.33%
Demoxepam	12	2.27%
Diazepam	8	1.52%
Lorazepam	20	3.79%
Nordiazepam	26	4.92%
Oxazepam	34	6.44%
Temazepam	19	3.60%
Cannabinoids (any)	164	31.06%
Cardiovasculars (any)	20	3.79%
Miscellaneous (any)	31	5.87%
Mitragynine	13	2.46%
Muscle Relaxants (any)	23	4.36%
Xylazine	9	1.70%
Cyclobenzaprine	8	1.52%
Novel Psychoactive Substances (any)*	7	1.33%
Etizolam	7	1.33%
Sedatives (any)	5	0.95%
Zolpidem	5	0.95%
Stimulants (any)	447	84.66%
Benzoylecgonine	289	54.73%
Caffeine	203	38.45%
Cocaethylene	25	4.73%
Cocaine	113	21.40%
Cotinine	253	47.92%
Nicotine	16	3.03%
Urologicals (any)	4	0.76%

(Continued)	Concentration mean(SD)	Freq	Percent
Designer opioids (any)	-	343	64.96%
4-ANPP	-	341	64.58%
Acetylfentanyl	-	150	28.41%
Butyrfentanyl	-	3	0.57%
Carfentanil	-	1	0.19%
Furanylfentanyl	-	1	0.19%
Methoxyacetylfentanyl	-	2	0.38%
Opioid Analgesics (any)	-	525	99.43%
6-acetylmorphine	4.64 (1.99)	7	1.33%
6-beta-Naltrexol	-	2	0.38%
6-Monoacetylmorphine	-	57	10.80%
Buprenorphine	28.91 (88.77)	26	4.92%
Codeine	11.89 (14.35)	46	8.71%
Dextromethorphan	248.25 (236.04)	4	0.76%
Dihydrocodeine	4.35 (1.77)	2	0.38%
EDDP	206.38 (256.63)	14	2.65%
Fentanyl	24.79 (74.88)	501	94.89%
Hydrocodone	24.28 (10.17)	12	2.27%
Hydromorphone	32.40 (35.17)	23	4.36%
Methadone	465.91 (566.10)	18	3.41%
Morphine	65.97 (190.92)	145	27.46%
Naloxone	-	109	20.64%
Naltrexone	-	1	0.19%
Norbuprenorphine	19.44 (48.64)	37	7.01%
Norfentanyl	5.64 (15.50)	419	79.36%
O-desmethyltramadol	1052.00 (1073.39	29	5.49%
Oxycodone	209.70 (724.30)	51	9.66%
Oxymorphone	26.66 (21.48)	46	8.71%
Tramadol	6602.40 (14179.72)	46	8.71%

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APPENDIX D

OPIOID DATA TO ACTION (OD2A)

2021 SEMI-ANNUAL REPORT

2021 Half-Year Overdose Surveillance Report:

January 1, 2021 – June 30, 2021

Overdose Data to Action (OD2A)

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OD2A OVERDOSE DATA TO ACTION PALM BEACH COUNTY

Florida HEALTH Palm Beach County

Overdose Data to Action (OD2A)

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Funding Agency

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Overdose Data to Action (OD2A)

Purpose

The Overdose Data to Action (OD2A) innovative surveillance project at the Florida Department of Health (FDOH) in Palm Beach County (PBC) aims to increase the surveillance of suspected drug overdose and use that data to drive action, policy change, and community outreach. Surveillance of suspected drug overdose events in PBC can help the overdose epidemic by identifying clusters or areas of high drug overdose incidences, learning more about the social determinants of substance use disorder, and can help identify novel substances or new trends in illicit drugs. The findings of the data collected through this surveillance initiative are designed to be shared with PBC community, providing a foundation of evidence for prevention overdose and early intervention for people with substance use disorder (SUD).

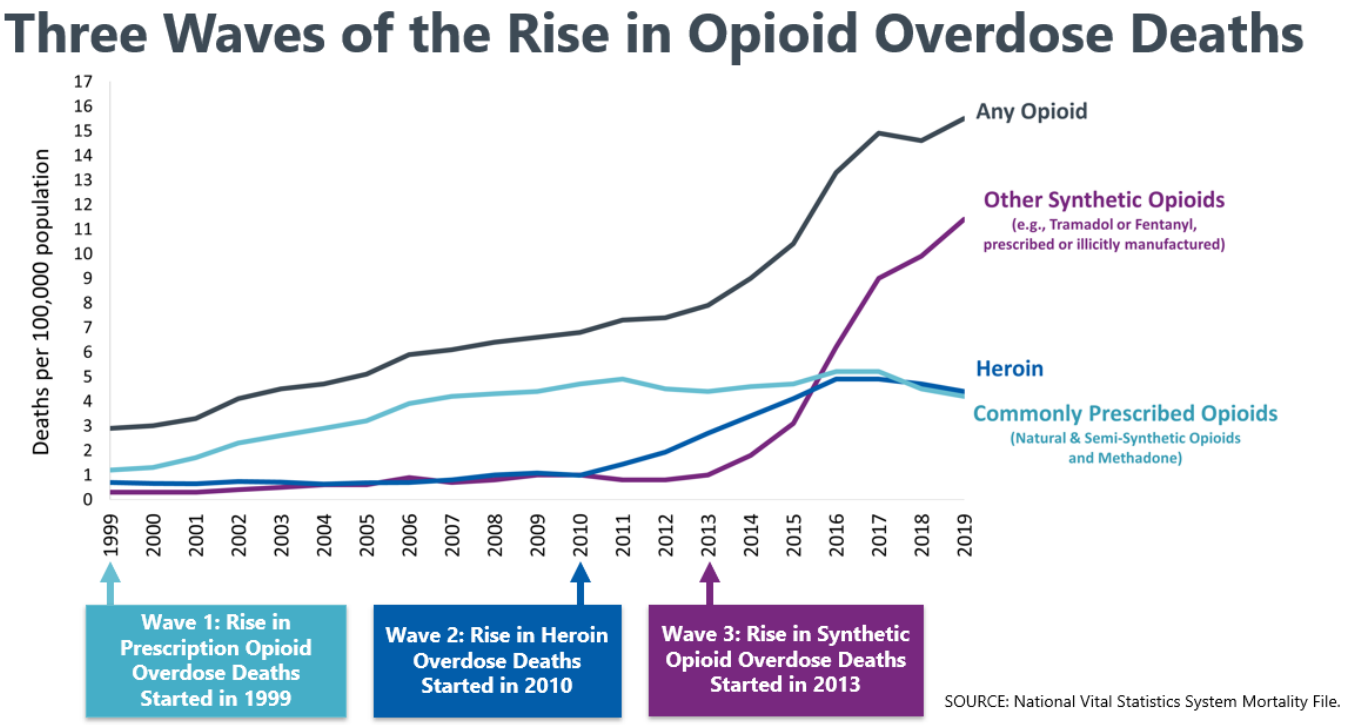


Image source: CDC, Understand the Epidemic, https://www.cdc.gov/opioids/basics/epidemic.html

The 4th Wave: Psychostimulants

In recent years, there has been a significant increase in the number of deaths due to psychostimulants[1]. Psychostimulants are a broad category of drug that includes cocaine, methamphetamine, MDMA, and prescription stimulants like Adderall and Vyvanse. Stimulant-involved overdose deaths tend to disproportionally affect racial and ethnic minority groups. Use of psychostimulants together with opioids and the increasing presence of fentanyl-contaminated drug supply are driving this new wave of overdose deaths.

Overdose Data to Action (OD2A)

Data

The public health approach to the overdose epidemic is multidisciplinary in that it examines the epidemic through the lens of a whole person perspective. This approach requires the consideration of the individual health behaviors and genetic makeup that influences health; but it also the social and physical environments as well, which accounts for an estimated 30-55% of health outcomes[2]. The integration of different sources of data into a single cohesive data set, can add elements of the social determinants of health (SDH) to overdose surveillance that might otherwise be overlooked.

The social-ecological model considers the complex interactions between individuals, interpersonal relationships, community, societal factors, and how these factors might influence a person's health and health outcomes.

Data Sources

Primary data for suspected overdoses were collected from three sources: Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) database, emergency department medical records, and the medical examiner's database. All data collected was securely stored and followed strict HIPAA compliance.

Syndromic Surveillance: De-identified syndromic surveillance data was collected through ESSENCE. All 14 hospitals in Palm Beach County participated in the reporting of data to ESSENCE. Suspected drug overdoses were identified through a query search of ED chief complaints and discharge diagnostics codes that corresponded to a suspected drug overdose.

Non-fatal overdose data: Data for suspected drug overdoses were collected from 10 hospitals in PBC through the collection of ED medical records.

Fatal overdose data: Fatal overdose data were obtained from the medical examiner's database.

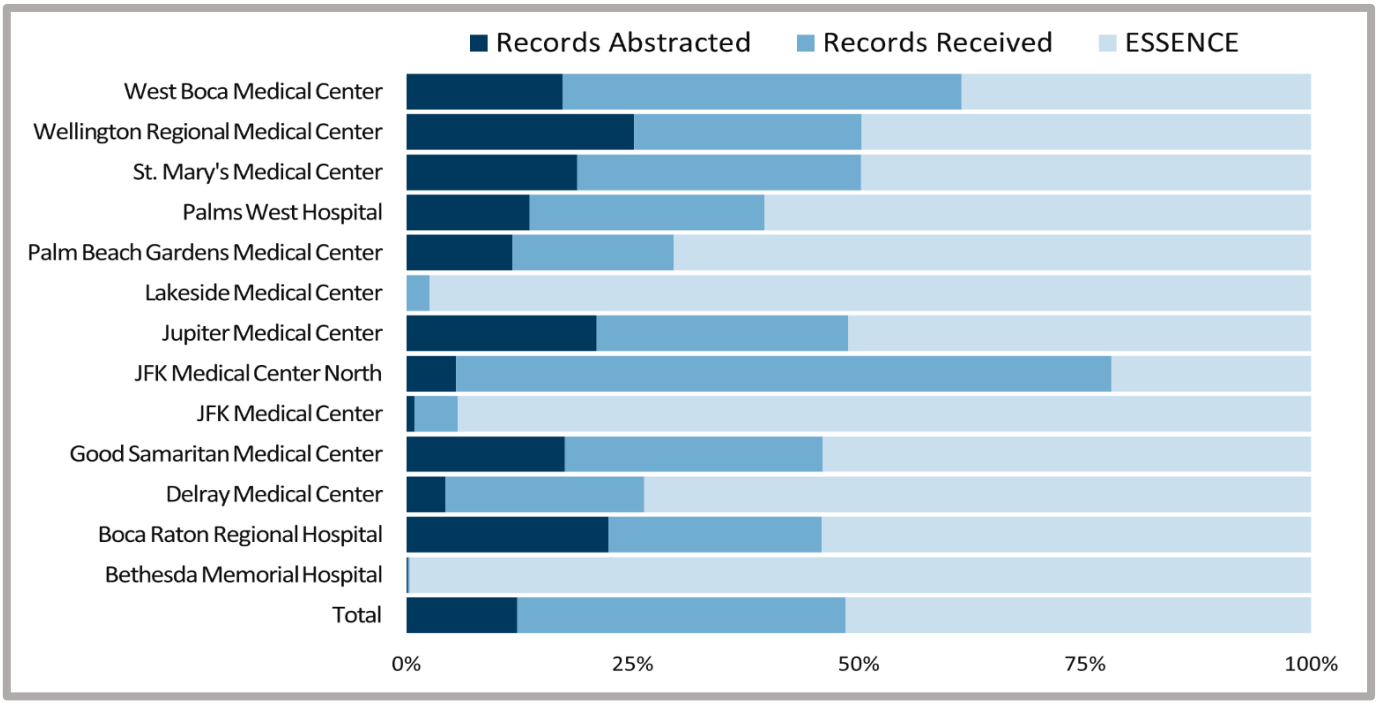
Data

Supplementary Data

Overdose incident data was supplemented with available public health resources including Merlin (Florida's disease surveillance database), STARS (Florida's STD surveillance database), and Accurint for Government® (used for housing information and criminal records check). These data sources provided valuable information on population needs assessment and important social determinants of health. This innovative approach to overdose surveillance attempts to identify potential risk factors and areas of opportunity for prevention and early intervention, to better inform and educate our community and drive actionable change.

Data Limitations and Considerations

It is important to consider the limitations of the data report. The data presented reflects a sample of suspected drug overdose from OD2A-participating hospitals. Hospital participation in the **OD2A innovative surveillance initiative** was completely voluntary, and not all hospitals participated during the time frame of this report. Thus, underlying population differences between hospital catchment areas are likely to exist. Additionally, data from the medical records received at times contained missing or incomplete data. Areas of data collection most significantly affected by this included toxicology (70% missing), history of overdose(s) (64% missing), factors contributing to drug abuse or overdose (30% missing), current medication list (40% missing), mental health (50% missing), and physical health (38% missing). Data abstracted from medical record free text notes may be subject to bias, dictation system errors, and patient cooperation with clinical staff which may result in gaps in the data. Patients may have provided false information to avoid stigma associated with substance use, legal repercussions from law enforcement, or from decreased mental capacity due to intoxication. These data limitations should be carefully considered when reviewing the content of this report and the wider implications.



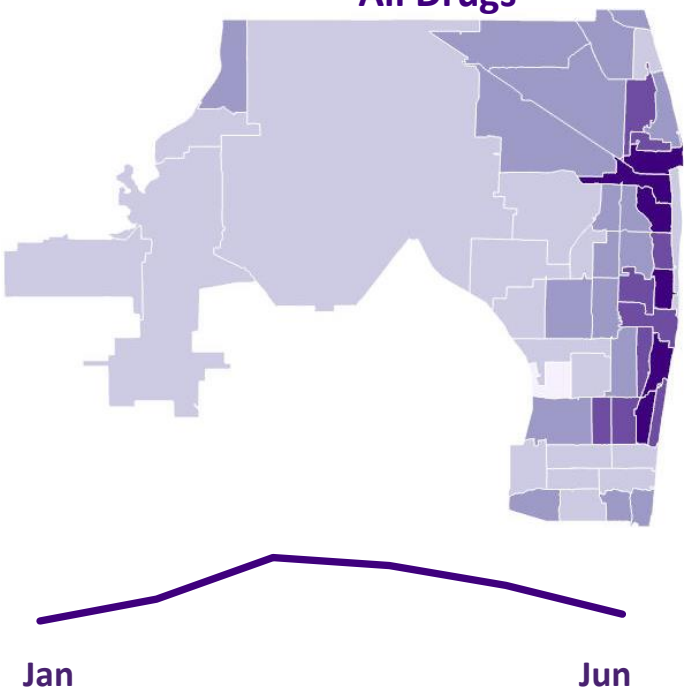
The figure above compares the relative proportion of suspected drug overdoses identified through syndromic surveillance to the proportion of medical records received and the proportion of medical records that met case definitions for suspected drug overdose.

Overdose Data to Action (OD2A)

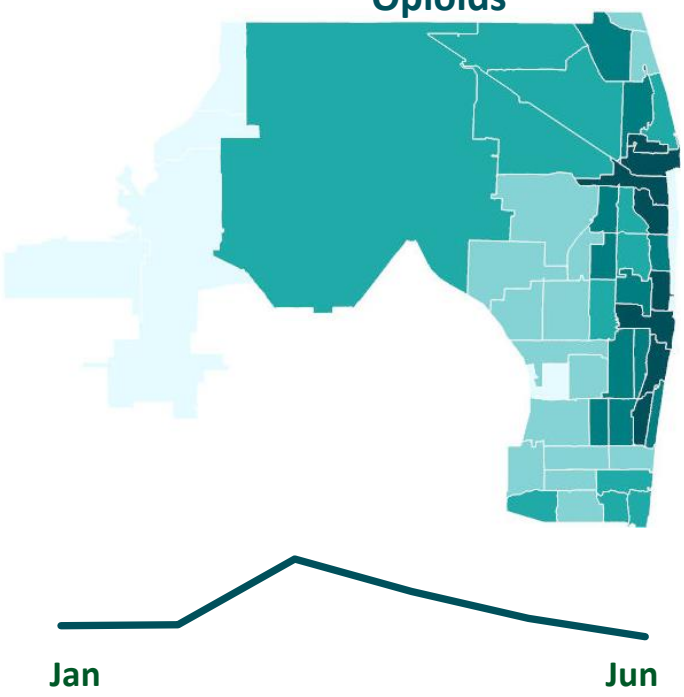
Syndromic Surveillance

Regional Distribution of Suspected Overdoses

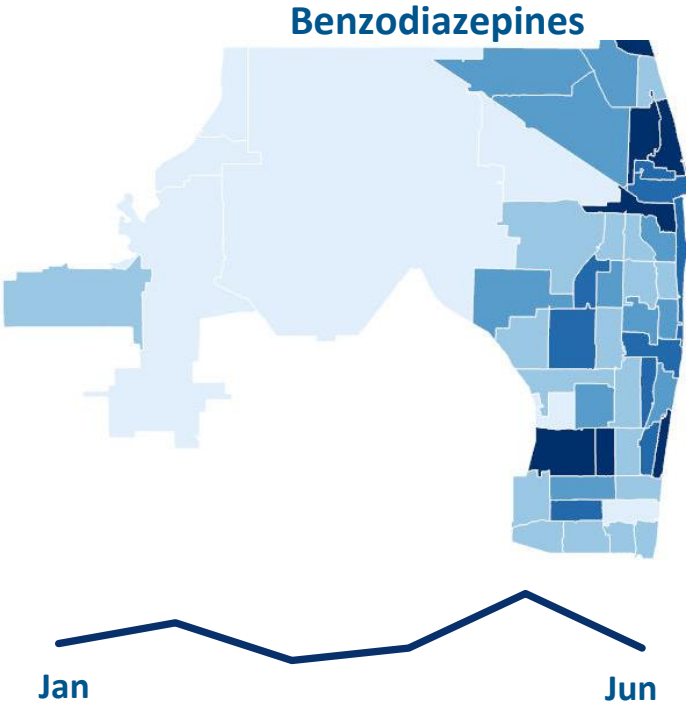
All Drugs



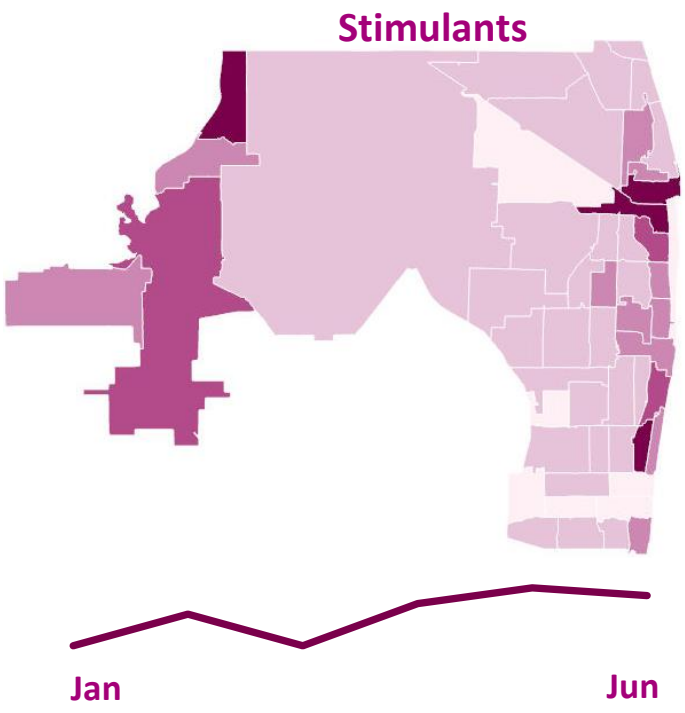
Opioids



Benzodiazepines



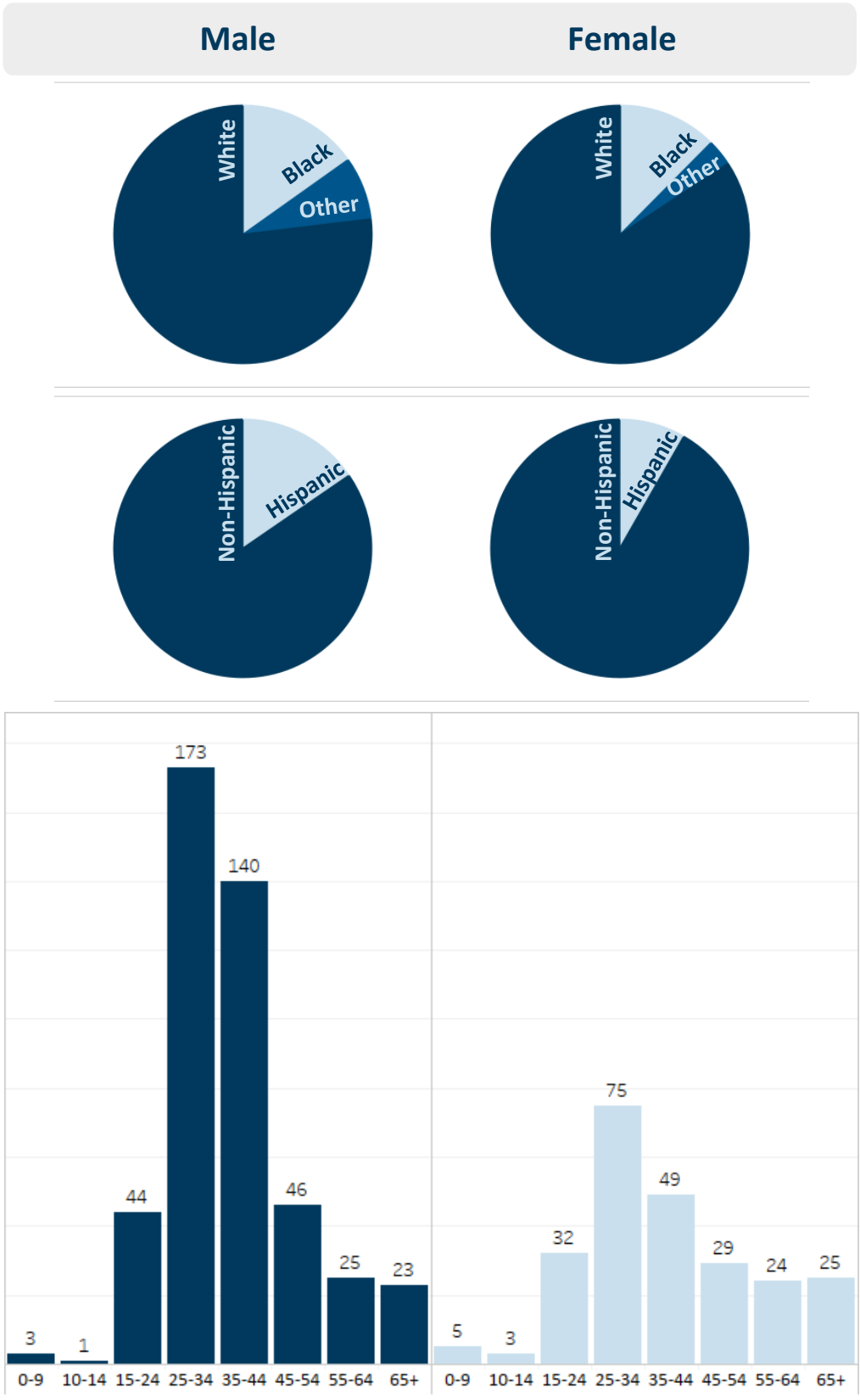
Stimulants



Overdose Data to Action (OD2A)

Demographics

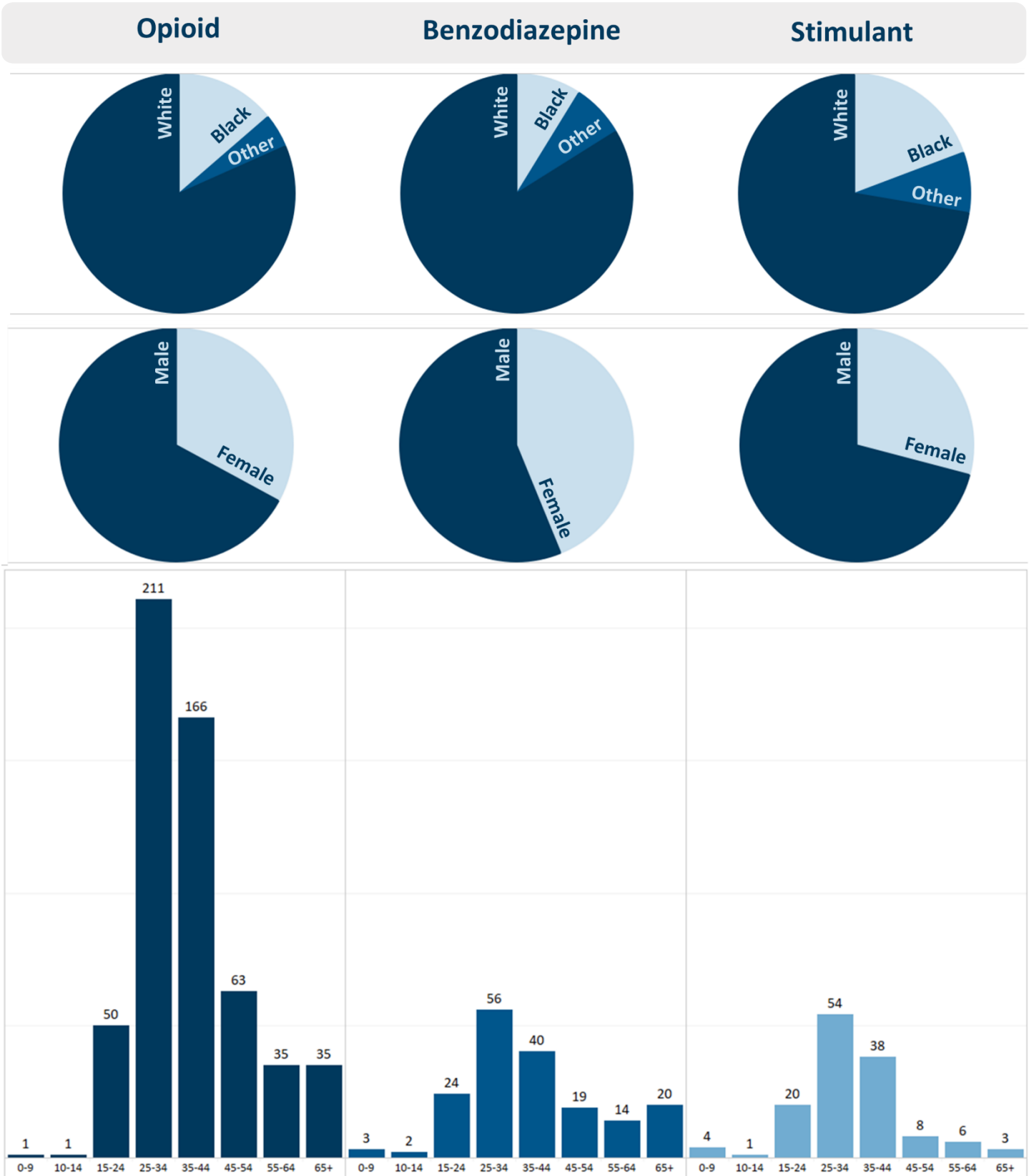
By Gender



Overdose Data to Action (OD2A)

Demographics

By Drug



Overdose Data to Action (OD2A)

Social Determinants of Health

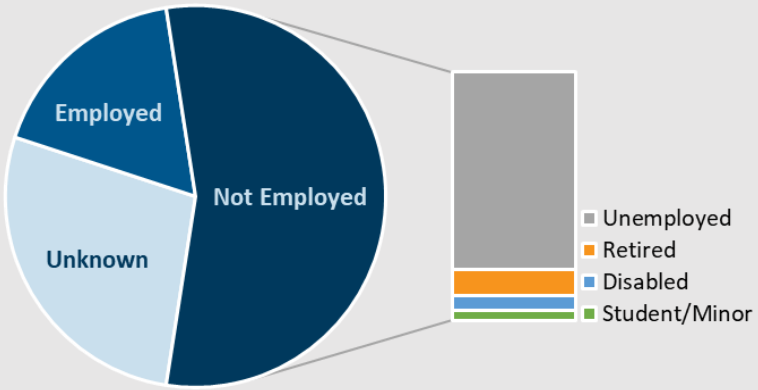
Housing

1 in 3

Experienced transient or unstable housing

What is *unstable* housing?

Homeless/Homeless Shelters
Sober Homes/Halfway Houses
Prison/Jail
Hotels/Motels
Couch Surfing
Other unstable living arrangements



Employment

Employment is a strong indicator of economic and financial stability[3]. Gainful employment is associated with increased health and well-being and may help ensure that a person's basic needs are met.

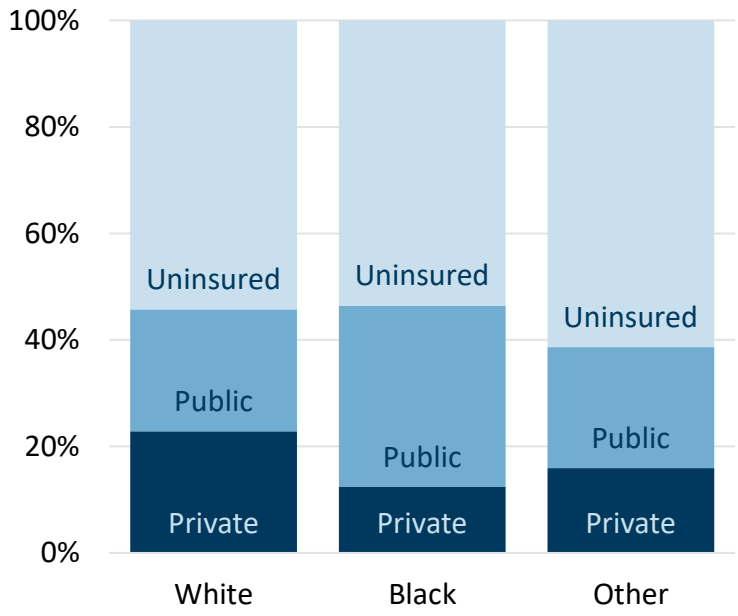
Most patients were not employed at the time of overdose. **Unemployed** adults accounted for **44%** of patients. Only **17%** of patients were employed.

Health Insurance

White patients were more likely to have private health insurance. Public health insurance, like Medicaid, offer much less flexibility and limit treatment options for people with substance use disorder.

1 in 10

Drug treatment facilities in Palm Beach County accept **Medicaid insurance**



Overdose Data to Action (OD2A)

Social Determinants of Health

Criminal History

The percentage of patients with a prior arrest or criminal record

46% Drug possession

33% Possession of drug paraphernalia

10% Possession with intent to distribute

15% Driving under the influence

43% Theft/burglary

29% Violent crimes

15% Disorderly conduct

4% Child endangerment

4% Prostitution

Criminal history, as defined here, is the presence of a criminal charge or arrest record regardless of whether the charge resulted in a conviction.

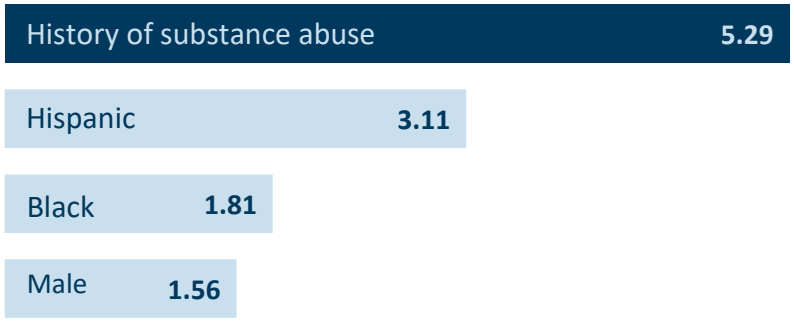
Nearly three-quarters of patients **(73.3%)** were found to have a criminal record or prior arrest. Given the strong association between substance use disorder and crime[4], the **criminal justice system** is a critical area of opportunity for early intervention for those with substance use disorder. Despite estimates that about one-half of the US prison population abuse drugs, it is still relatively uncommon for inmates to receive evidence-based treatment while incarcerated[4].

Drug arrest can hinder a person's ability to find gainful employment and stable housing, which can further the cycle of substance abuse. Social stigma from arrests can also negatively impact a person's interpersonal relationships and local support networks. These factors can act as barriers on the road to recovery.

What are the odds?

Hispanic patients were **3 times** more likely to have a criminal record history of drug possession than non-Hispanic patients, even after adjusted for race and age.

The odds of a prior arrested for drug possession

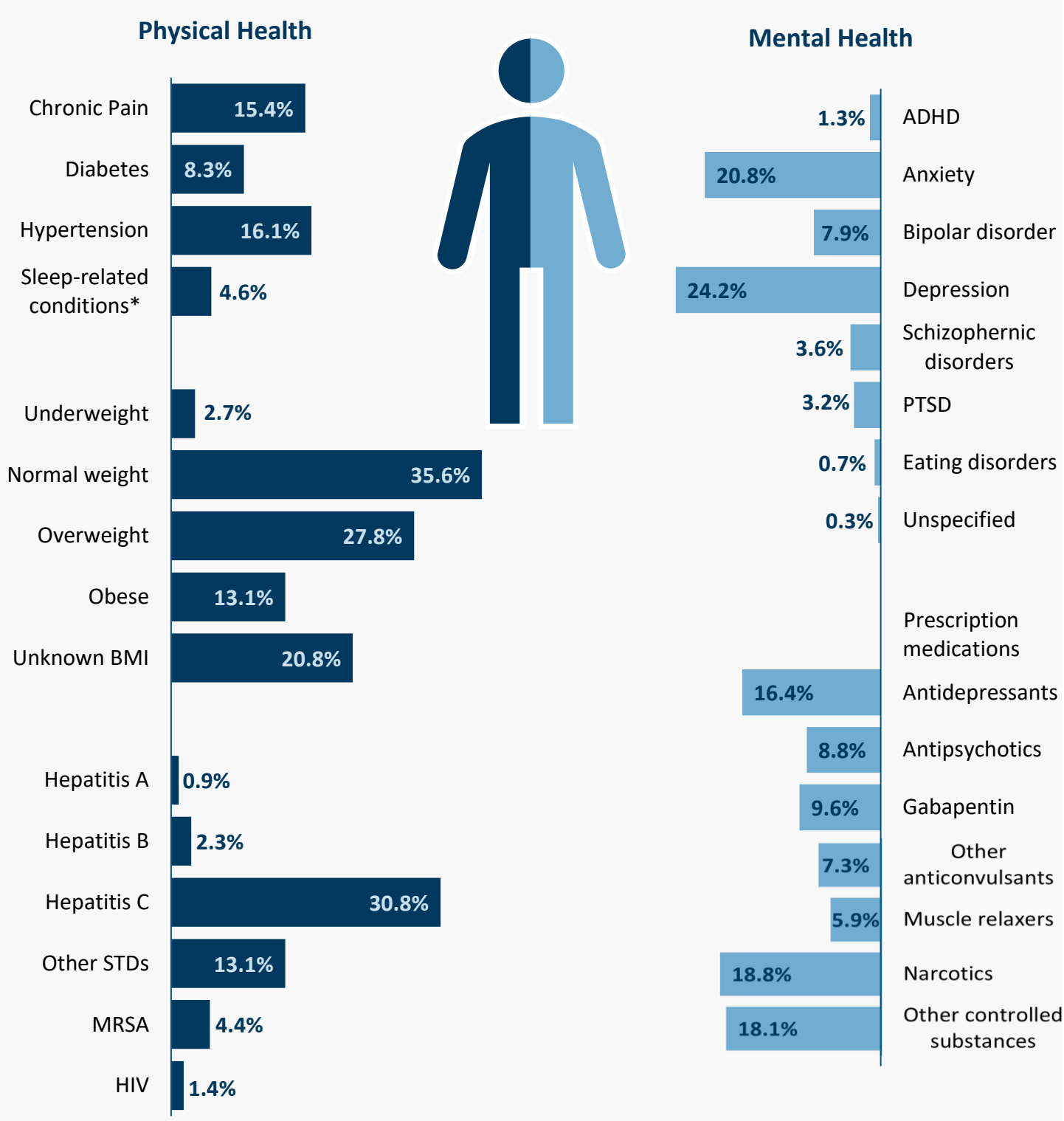


History of substance abuse vs no known history of substance abuse OR 5.29, 95% confidence interval (CI) [1.71, 16.43] adjusted for age, race, and gender
Hispanic vs non-Hispanic OR 3.11 95% (CI) [1.60, 6.04] adjusted for age and race
Black vs White OR 1.81 95% (CI) [1.04, 3.05] adjusted for age and gender
Male vs Female OR 1.56 95% (CI) [1.09, 2.24] adjusted for age and race

Overdose Data to Action (OD2A)

Health and Wellness

Past Medical History



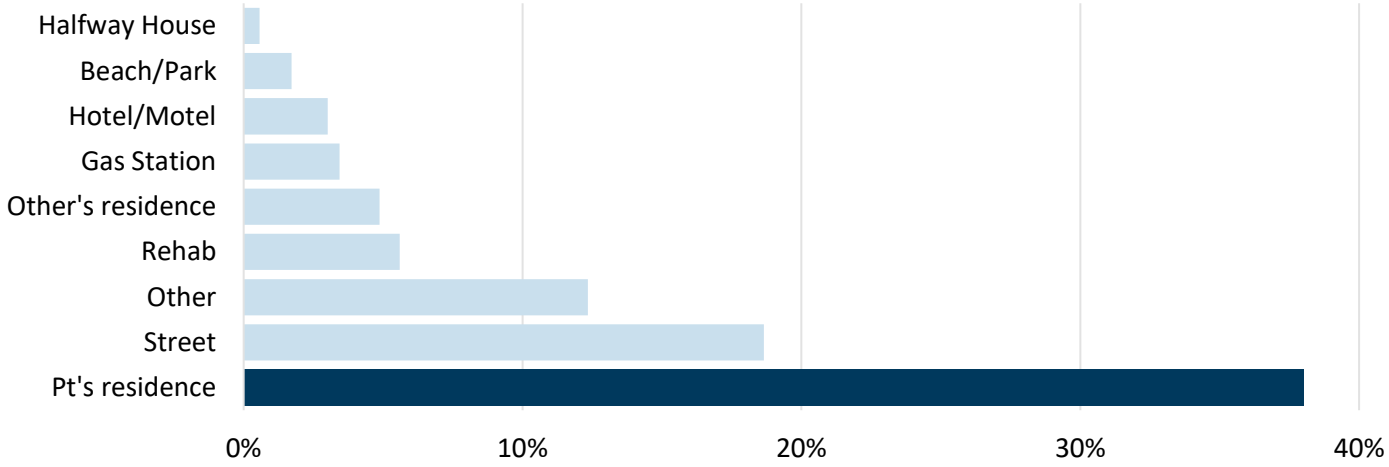
* Sleep-related conditions included insomnia, sleep apnea, or narcolepsy

Overdose Data to Action (OD2A)

Pre-Hospital Data

Location of Overdose

38% of overdoses occurred at home. Other significant locations where overdoses occurred included outdoors/ streets **(19%)** and gas stations **(6%)**. **12%** of overdose location data was missing or unknown.



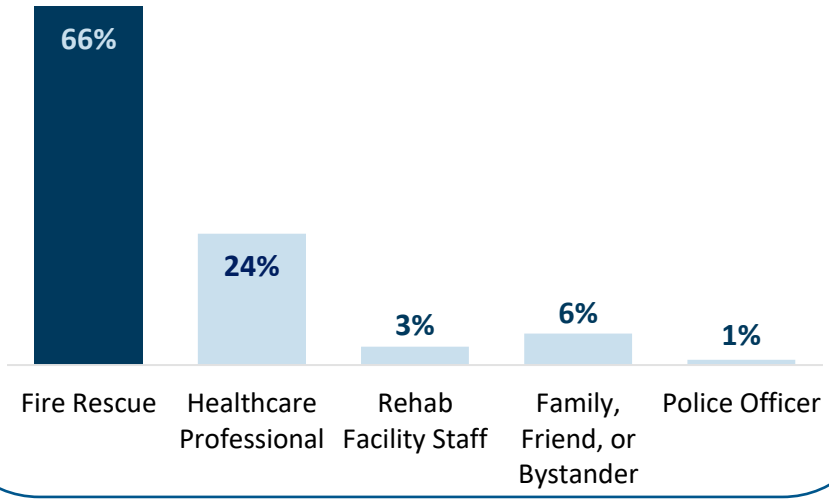
10% of overdoses occurred in a motor vehicle
2% were involved in a car accident at the time of overdose

Mode of Arrival

1% arrived by police transport
12% were brought in by private vehicle
86% were transported by fire rescue services

3 in **5**
Patients were revived with naloxone (all drug) and **71%** of opioid overdose patients required naloxone

Who administered naloxone first?

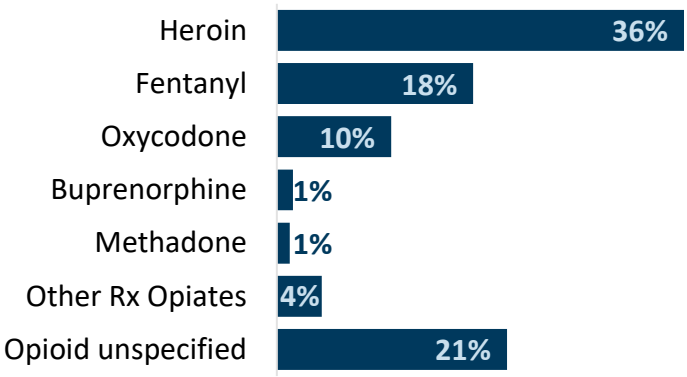


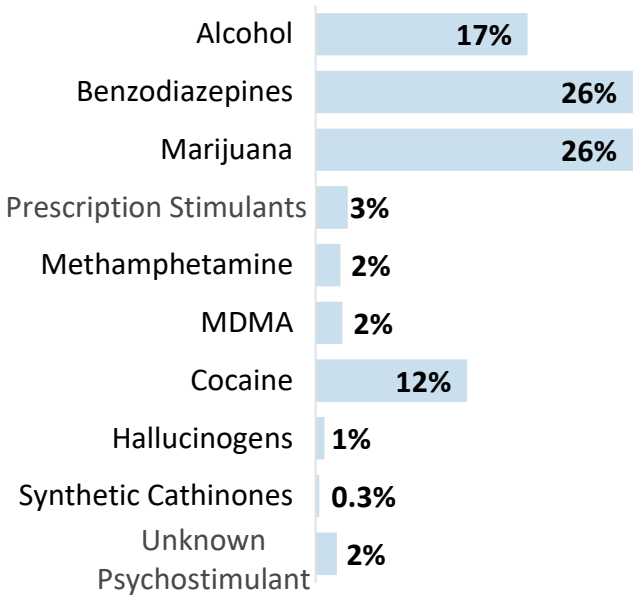
Overdose Data to Action (OD2A)

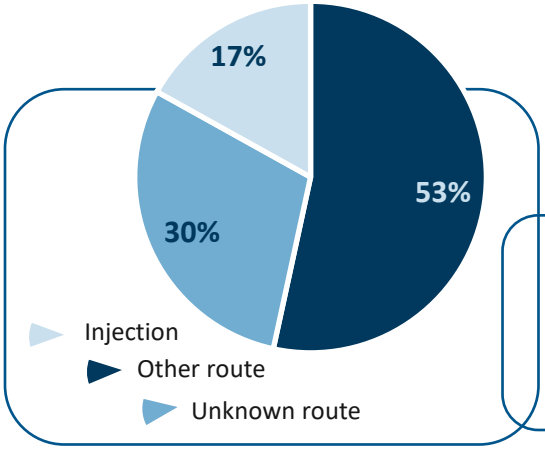
Overdose Incident Data

Ingested Substances

The following represents all reported substances relating to the overdose event and are non-mutually exclusive. Overdose events must have at least included an opioids, benzodiazepines, *or* psychostimulants to be included. The frequency of all reported substances ingested are displayed in the figure below.







Route of Administration

17% of people who overdosed on opioids injected intravenously (IV), and **3%** of people who overdosed on non-opioid substances (not shown) injected them

Recognizing an Overdose

Signs and symptoms of overdose can vary greatly depending on the type of substance ingested and the physiological characteristics of the individual.

Opioid[5]

Cold or blue skin
Slow shallow breathing
Delirium
Pinpoint pupils
Loss of consciousness
Decreased responsiveness

Reversal medication: Naloxone

Benzodiazepine[6]

Slurred speech
Excessive drowsiness
Agitation and anxiety
Hallucinations
Unresponsiveness
Difficulty breathing

Reversal medication: Flumazenil

Stimulant[7]

Psychosis
Agitation and irritability
Delirium
Rapid speech and restlessness
Tachycardia and chest pain
Tremors or seizures

Intervention: Physical/chemical sedation

Overdose Data to Action (OD2A)

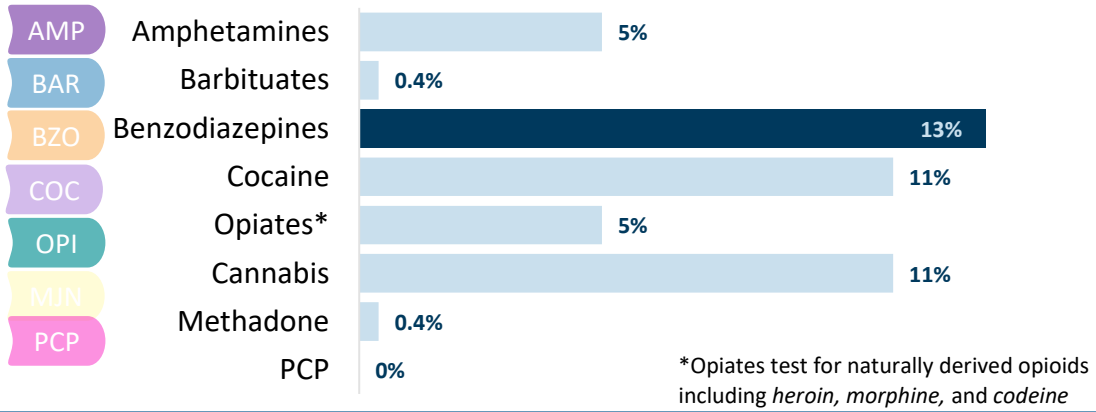
Overdose Incident Data

Toxicology

Hospitals primarily use standard panel urine drug tests to identify potential drugs present in a patient's system. Toxicology was reported in medical records in 29% (n=205) of overdose events. Standard panel tests do not test for fentanyl and oxycodone, both of which have been responsible for most overdoses over the years. Of the 697 overdose records analyzed, only 20 records **(3%)** reported fentanyl toxicology screening.

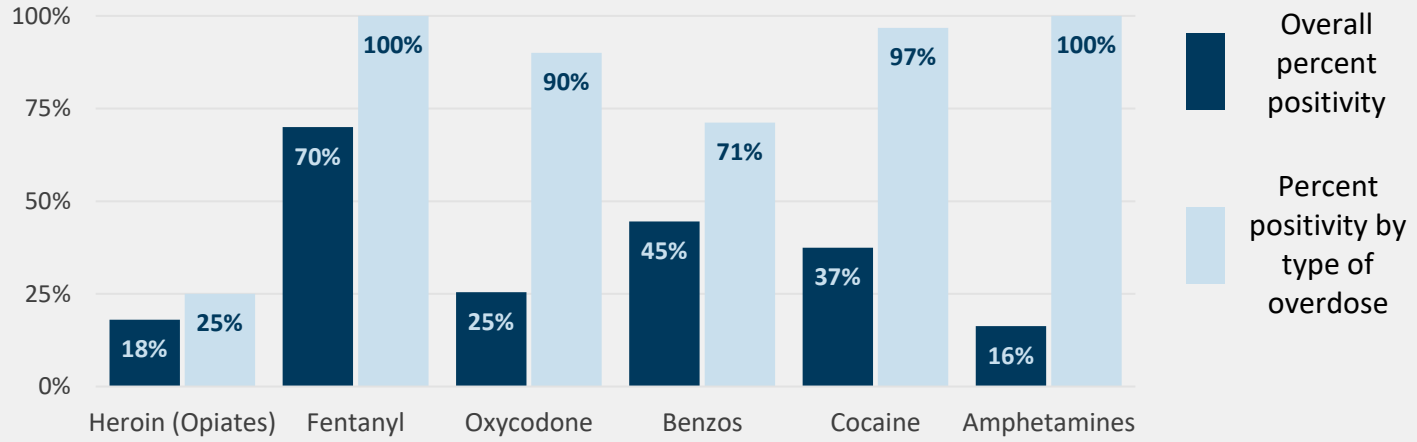
Various factors might explain the lack of toxicology test results such as, tests were completed but results were not attached to the patient records, patient left against medical advice (AMA) before test could be completed, and/or the patient refused to submit a sample for analysis due to stigma surrounding drug use or out of fear of legal persecution.

Proportion of patient records that reported a positive drug screen



*Opiates test for naturally derived opioids including *heroin, morphine,* and *codeine*

Positivity percent for records where drug toxiology was reported



The figure above shows the percent positivity rate for records that reported hospital drug screen and by reported drug use. For example, of records that included toxicology, 45% tested positive for benzodiazepines. Of records that reported benzodiazepine-involved overdose **AND** included drug screen results, 71% of records tested positive for the drug indicated.

Overdose Data to Action (OD2A)

Overdose Incident Data

Outcomes

7% Acute toxic or metabolic encephalopathy

5% Aspiration pneumonia

2% Rhabdomyolysis

5% Acute kidney injury (AKI)

Complications

One way to gauge the severity of an overdose is by the presence of potentially life-threatening complications following the event. Some complications require an extended hospital stay for observation and treatment, while other complications such as respiratory failure might require intubation and intensive care.

Disposition

More than half (61%) of patients treated at the emergency department were stable for discharge. Patients that were stable for discharge generally were discharged to home (either their home or a loved one's) but may also have been discharged to a drug treatment facility or to police custody. 9% of patients left the hospital early, leaving against medical advice (AMA).

61% Standard ED discharge

9% left against medical advice

18% admitted for observation

7% admitted to intensive care (ICU)

5% baker acted or transferred to a psychiatric facility

In Remembrance…

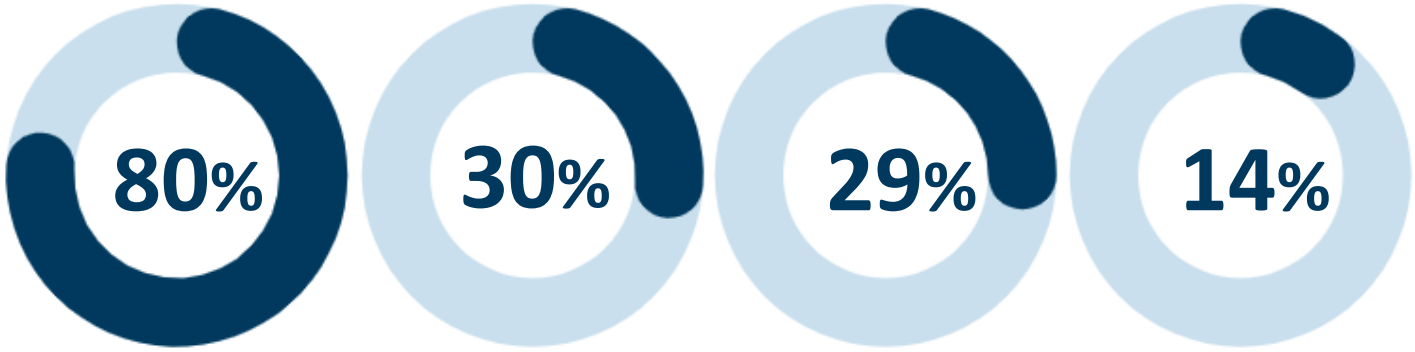
Since 2010, over 4,000 people have died of a drug overdose in Palm Beach County and the numbers continue to climb – with more than a third of these deaths occurring in the past 3 years alone[8]. From January 1 through June 30, 2021, OD2A collected data on more than **697** non-fatal suspected opioid, benzodiazepine, and stimulant overdoses from **626** individuals. **15** of these individuals have since lost their battle with SUD, experiencing a fatal overdose. They leave behind family, friends, and loved ones.

The OD2A team remembers those who lost their battle.

Overdose Data to Action (OD2A)

Harm Reduction

History of Substance Abuse



Harm reduction is critically important in preventing and reducing drug overdose mortality and the morbidity of co-occurring diseases and conditions associated with drug use. Understanding a person's history with substance abuse and recovery can inform public health professionals to the overall needs of the population and identify areas where help and resources can be most efficient. **80%** of patients had a known history of substance abuse, and **30%** had a known prior overdose in the past. **29%** of patients were found to have a history of intravenous (IV) drug use. **14%** of patients reported prior attempt(s) at recovery through medication-assisted treatment (MAT) program.

Potential Contributing Factors or Circumstances for Substance Use and/or Overdose

57% of patients reported using drugs for recreational purposes

10% of overdoses were attempts at suicide or self-harm

9% reported self-medicating chronic or acute pain

9% overdosed after a period of abstinence

5% of patients were binging drugs before going to rehab

9% reported using drugs to cope with stress or mental health issues

10% reported accidentally taking too much of their prescription medications

Overdose Data to Action (OD2A)

Harm Reduction

Naloxone

Naloxone (Narcan) is an FDA-approved medication that is both safe and effective at treating opioid-induced respiratory depression[9]. Naloxone is available by prescription as a nasal spray that requires minimal training to use effectively. This means that family, friends, and other non-medical individuals can learn how to provide first aid for opioid overdoses, potentially saving the person's life. The effects of naloxone can wear off quickly, so people should always **call 911**. Harm reduction strategies such as co-prescribing naloxone with prescription opioid medications or after hospital discharge following a non-fatal overdose, can play a vital role in reducing overdose fatalities.

"Naloxone gave me a second, third, and fourth chance at life… Now, looking back, I am so very grateful for the opportunities I have had in my recovery and in my life that would never have been possible if it weren't for people saving my life, even when I didn't want to be saved."[10]

Percentage of patients engaged in harm reduction before and after overdose

Active Narcan prescription indicates the proportion of the sample that has previously engaged in harm reduction strategies prior to the current overdose. In 4% of the overall sample, patient records reported an active prescription for Narcan at the time of overdose. For patients who experienced an opioid-involved overdose, active prescriptions were marginally higher at 5%. Emergency department (ED) implementation of harm reduction strategies was measured through physician prescribed Narcan at time of discharge.

For all drug overdoses, 70% (n=486) of patients were discharged from the ED either regularly or against medical advice (AMA). The remaining 211 patients where admitted to the hospital or transferred to another facility. 15% of all patients who were discharged from the ED received Narcan or a prescription for Narcan at discharge. For opioid-involved overdoses, 74% (n=414) of patients were discharged from the ED. 18% of those patients received Narcan or a prescription for Narcan at discharge.

16% of patients whose home medications included at least one narcotic prescription received a prescription for Narcan after discharge from the emergency department.

Overdose Data to Action (OD2A)

Harm Reduction

Evidence-based treatment for opioid use disorder (OUD)

Medication-Assisted Treatment (MAT) is a treatment program that combines the use of FDA-approved medication with counseling and therapy to treat OUD[11]. Medications for opioid use disorder (MOUD) include methadone, naltrexone, and buprenorphine. **14%** of patients reported prior treatment with MOUD. Buprenorphine/naloxone (Suboxone) was the most frequently reported MOUD, followed by buprenorphine alone (Subutex), methadone, and lastly naltrexone.

Societal Barriers to Accessing MAT[11]

Stigma from the recovery community that MOUD is substituting one drug for another

Stigma from healthcare providers or pharmacists who are prejudice and/or discriminatory towards patients seeking MOUD

Regulatory restrictions for practitioners require extra training and an application for a waiver to legally prescribe MOUD

Cultural norms within minority and ethnic communities regarding mental health and SUD

Religious beliefs regarding SUD and treatment with the MAT program

Individual Barriers to accessing MAT[11]

Patient's previous negative experiences in a MAT program

Patient does not have reliable transportation to be able to travel to and from frequent appointments while in a MAT program

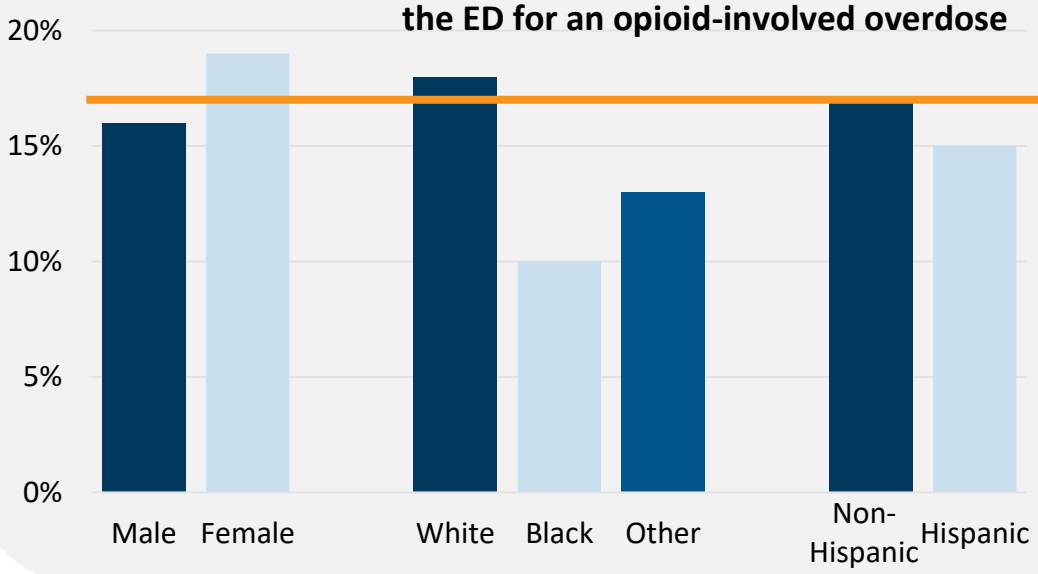
Patient does not believe that MAT will help or that it is not effective in treating OUD

Treatment cost and health insurance barriers

Mobility issues for the elderly and mobility-impaired to make in-person appointments

Long wait times at clinics that supply MOUD for low income or uninsured individuals

Percentage of patients referred to a MAT program upon discharge from the ED for an opioid-involved overdose



17%

Of opioid overdoses were referred to MAT

5% of doctors in PBC are waived to provide MAT services. That is 1.5 doctors for every 10k residents

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APPENDIX E

RECOVERY CAPITAL INDEX (RCI)

PARTNER STORY

Recovery Capital Index®
CommonlyWELL.

Partner Story

PALM BEACH COUNTY FLORIDA

Making the Recovery Capital Index® Integral to It's System of Care Efforts

10 AUG 2021

WHAT WE MEASURE DRIVES WHAT WE CAN CHANGE. The Recovery Capital Index® (RCI) provides a comprehensive picture of a person's whole wellbeing using an online, automated survey. The RCI is person-centered and scientifically validated to reliably measure addiction wellness regardless of treatment modality, recovery pathway, or substance of use. It is used in healthcare, recovery support, and social impact settings.

POWERING THE PURSUIT OF PURPOSE AND WELLBEING FOR ALL. Commonly Well is a technology and behavioral design company. The Recovery Capital Index® is Commonly Well's first tool developed to harness the power of individual social, environmental, and behavioral information to help people design better lives. Collectively, Commonly Well believes that wellbeing should not be reserved for the few but common for all.

WHY PALM BEACH COUNTY CHOSE THE RECOVERY CAPITAL INDEX TO SHIFT TO RECOVERY-ORIENTED, PERSON-CENTERED CARE

Palm Beach County Florida has been at the center of the opioid crisis for many years. In an effort to address the complex challenges of the opioid epidemic, the County initiated a comprehensive opioid response plan.

With so many lives impacted by substance use disorder, County leaders and stakeholders knew they needed a more integrated and collaborative approach to care. They also recognized that outcomes data needed to be unified across all agencies, more recovery-oriented, and representing the full recovery experience.

The need for a more meaningful solution, one that established a pulse of someone's recovery journey no matter where they were in the continuum of care, led them to the Recovery Capital Index® (RCI). The County's shift to a more person-centered and recovery-oriented approach is complex, but the RCI and its secure platform are helping move the strategy in the right direction.

ACTIVITY

9 agencies using RCI

274 clients engaged

513 RCI surveys completed

OVERVIEW
Palm Beach County Community Services Department Office of Behavioral Health and Substance Use Disorders coordinates strategies, services, policy, and funding in Palm Beach County.

CHALLENGE
Palm Beach County needed a validated and shared outcomes measure that aligned with its shift to a person-centered and recovery oriented system of care from a treatment-centered system.

SOLUTION
The Recovery Capital Index® (RCI) delivered by automated SMS and email to clients through a web-based platform giving all networked providers visibility to results maintaining continuity of outcomes throughout the system of care.

LOCATION
West Palm Beach, FL

PRODUCT
Recovery Capital Index Survey and Platform

INCREASING VISIBILITY AND COORDINATION.

When Palm Beach County launched its opioid response plan, it set out to use a recovery capital measure. But all recovery capital measures are not equal. The County needed more than a survey. It needed the ability for the data collected to be visible to all participants in their new coordinated care model or recovery oriented system of care. The County did not want important recovery data to go into an agency-by-agency black box; essentially making it impossible for subsequent providers in the network delivering care to the same individuals unable to see a client's past or continued recovery capital data.

> **“Critical to the shift’s success is the ability to measure and monitor improvements at the individual and systems level.”**
>
> *John L. Hulick, MS, Senior Program Manager, Office of Behavioral Health and Substance Use Disorders*

The RCI is built upon a platform designed for and used by many states and institutions for their health information exchange. This meant that Palm Beach County could invite onto the platform all of its funded agencies who are part of their coordinated care system. With proper case management and informed consent at the beginning of a client’s journey, all of their RCI scores and responses could be viewed by any other network provider. This means that a client’s recovery is constantly measured throughout their journey and any service they connect with in the network can see their progress and engage in an informed and personalized way.

“This is truly individualized and personal care on a level we’ve never had before,” said John Hulick, Palm Beach County’s Senior Program Manager with the County’s Office of Behavioral Health and Substance Use Disorders.

Hulick was tapped to lead the County's opioid epidemic response efforts in 2018. He's been in the behavioral health field for nearly 35 years, mostly in policy-making roles. Hulick also served in New Jersey Governor Christopher Christie's administration as Policy Advisor for Human Services, Children and Families. He was subsequently appointed by Gov. Christie to be the State's Drug Czar.

Palm Beach County chose the RCI just as much for the scientific strength of the instrument as it did for full visibility and security the platform provided to each agency using the tool. This visibility is good and critical to individuals receiving services too.

While other recovery capital instruments were considered, none met the scientific rigor nor statistical validation the County's move toward a recovery-oriented and person-centered system of care demanded.

"Living with substance use disorder is challenging, and building recovery is complicated, and then having to share and re-share what's going on is frustrating for people," Hulick said.

Because the RCI is a 360-degree view of a person's life and completed every 30 days, care providers can focus and plan in a progressing nature. This improves the client experience by eliminating frustration in the coordinated care process.

Key to coordinated care is the ability to see all of an agency's data in one place, but more importantly, to see their results in context with other providers in the network.

The RCI platform gives each agency the ability to see how they are performing and how other agencies are performing. It also allows other agencies insight into various recovery determinants that may be affecting care and driving outcomes.

"We cannot possibly know all the things that make it difficult for people to recover, but the more our agency clients report their recovery capital, we start to see what they see and can engage sooner, apply appropriate resources in the right places, and craft better policies," said Joanna Reid, Palm Beach County Community Services Department Grant Compliance Specialist.

A MORE MEANINGFUL INSTRUMENT.

Recovery is complicated and it cannot be captured in 10 questions alone, according to Hulick. If Palm Beach County is to be successful it needs deeper and more meaningful outcomes data.

“There’s a desire to make survey assessments short, I understand this, but what we might gain in time, we lose exponentially more when we don’t go deeper and make the surveys easier to complete on a client’s own time,” he said.

“The Recovery Capital Index provides a well-tested instrument and a level of expertise in its use and interpretation of data that made it an easy choice as the County continues to achieve its aims.”

John Hulick, Senior Program Manager, Office of Behavioral Health and Substance Use Disorders

The 68 items that make up the full validated Recovery Capital Index provide 22 indicators of a person’s recovery. These indicators are always changing through early recovery and life, generally. As the County builds out their person-centered and recovery-oriented system of care, they are seeing a wider view recovery from the diverse demographics of those they serve. They are also seeing a real-time pulse of people’s recovery that represents the circumstances in the community.

“Unlike other instruments and systems out there, the RCI platform is giving the County, our agencies, and their clients flexibility in capturing the survey data,” said Hulick.

From the moment Palm Beach County went live with the RCI, clients would receive a secure link to the survey through SMS and email, whichever was their preference. Every survey thereafter is automated to send every 30 days.

Agencies are beginning to save valuable time during intake processes and ongoing appointments by having their clients complete the survey outside the facility on their on devices, often in the comfort of their own home and lives.

“COVID obviously limited face-to-face care, but now that we’re getting back to in person services, time should not be spent completing surveys in the office—and that’s not necessary with the email and SMS functionality of the RCI platform,” Hulick said.

Time is really valuable in early recovery, Hulick explained. Nobody wants to be filling out surveys all the time. The full RCI takes less than 10 minutes to complete. That’s only 10 minutes every 30 days to get the most comprehensive picture of recovery that exists to providers and stakeholders in near real-time.

“We love the direction we’re going with the RCI and the rigor of science behind the instrument,” said Hulick. “The rigor has been applied to create shorter versions of the RCI and we look forward to seeing the increased flexibility with such a strong tool.”

“The people we serve are some of the most vulnerable and during the pandemic they showed us through the RCI areas of their life in our county that were affecting them most.”

John Hulick, Senior Program Manager, Office of Behavioral Health and Substance Use Disorders

SEEING RECOVERY IN A PANDEMIC.

While the County is still early in getting all the agencies it wants on the RCI platform, early use is proving promising with longitudinal data starting to accumulate the longer agencies use the tool.

Palm Beach County launched the RCI with agencies at the end of 2019 and into 2020. Then COVID hit. The entire landscape of providing care changed. Care became more digital overnight.

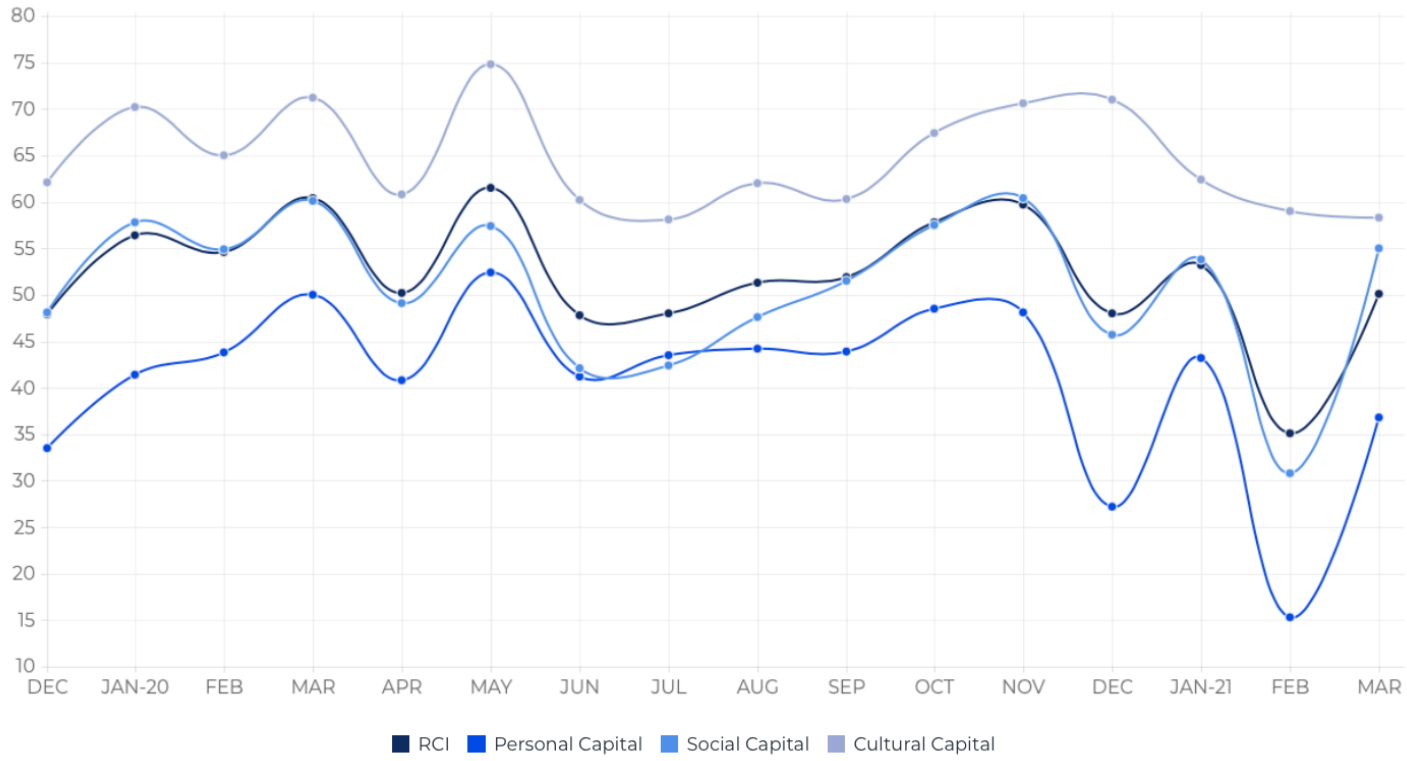
The RCI, as a web-based and automated tool, was ready for the shift. Providers could push the assessment by email and SMS and gather critical recovery data with the clients they were able to care for.

Longitudinal data at the individual level is key to demonstrating the effectiveness of specific interventions and to guide ongoing recovery planning. What might be happening in the community, however, may tell a different story. Recovery capital isn't just what a person can bring into their recovery, but it is also the collection of assets available to a person in a particular environment.

"The people we serve are some of the most vulnerable and during the pandemic they showed us through the RCI areas of their life in our County that were affecting their recovery the most." Hulick said.

As individuals came into various programs supported by the County and who were using the RCI, collective recovery capital began to emerge in a time-series view.

Regular and ongoing engagement with treatment and services providers was disrupted during the year. But from month-to-month, the County captured a community-based pulse of recovery capital



from a diverse population experiencing the pandemic as it moved through its stages of intensity across the County.

It was rather unexpected to see just how widely and intensely the pandemic impacted and continues to impact people's recovery capital in Palm Beach County.

Hulick and his team were anticipating systems level data by using the RCI, but what they can actually see in the data is something more profound. "It was hard to miss the profound deficits in housing and employment in our early data analysis, Hulick said. "We were also pleased to see strengths in social and cultural capital."

Recovery capital can be broken down into three key domains: Personal Capital, Social Capital, and Cultural Capital. Personal Capital are the collection of tangible and intangible assets available to or part of an individual like mental well-being and employment. Social Capital is the totality of an individual's relationship assets like family support and social mobility. And, Cultural Capital encompasses our values, beliefs, and connection to other social and community specific norms like sense of purpose and cultural relevance.

GROWING THE SYSTEM.

Despite the pandemic and all its challenges, the County opened the Palm Beach County HUB in May 2021. The HUB is a Recovery Community Center provides support and solutions for those living with substance use disorders, and empowers, connects, and advocates for individuals and their families in all stages of recovery.

Ian Stone is the Site Coordinator at the HUB. He says that many people needing basic needs are "met with assistance from their peers." This peer-based approach helps fight stigma and increase opportunities to access resources in the community.

Given the population the HUB serves — typically high need and underserved — Stone and his team slowly introduced the Recovery Capital Index into its processes. Many people require immediate attention and the most basic needs and a questionnaire can be disruptive to meeting those needs first.

That was just the case with one community member. But after getting this person a new social security card, food, clothes, and a copies of his ID, Stone asked if they could review his recovery capital. He said “yes.”

There was a noticeable deficit. The community member reported health concerns that were “really bothering him.”

“We made a plan to address these issues,” Stone said. “Based on the reporting narrative of the community member, I would never have known this need was outweighing the rest. The Recovery Capital Index helped tease out this critical issue.”

The community member and Stone put together a plan, engaged a Peer Specialist, and scheduled a time to follow-up on the defined action steps and reassess his recovery capital.

The Palm Beach County HUB is immediately living up to its name.

“Our sense of ‘system’ has been in the context of care and providers and direct services,” Hulick said. “Those we serve are telling us what elements of the community are impacting them most—this is a new kind of recovery advocacy and the future of communities being truly recovery-oriented.”

“The RCI changes everything about how we build out services to better serve our community. It allows us to discreetly and gently get a better sense of an individual’s capital which informs our menu of opportunities by showing us what people need most, even at times without themselves knowing.”

Ian Stone, Site Coordinator, Palm Beach County HUB

As the use of the RCI progresses and expands, the County will continue to focus at the individual level. At this level, the County expects the RCI to inform recovery planning, inform care processes, and improve long-term recovery outcomes. The County will achieve these aims by ensuring that front-line staff and clients alike are well-versed on how the RCI can aid an individual's recovery.

APPENDIX F

STEERING COMMITTEE MEMBER BIOGRAPHIES

(CURRENT, PAST AND EX OFFICIOS)

BEHAVIORAL HEALTH AND SUBSTANCE USE DISORDER STEERING COMMITTEE

CURRENT MEMBERS

Sharon Burns-Carter, C.A.C.

Ms. Carter is currently employed by Rales Jewish Family Services as Substance Use Outreach Coordinator, consults with a Wellness Resource Center, facilitating two weekly experiential groups and serves on the compliance committee with the Florida Association of Recovery Residences, ensuring that high quality standards of support are being delivered throughout Florida.

Sharon co-founded and was the Chief Operating Officer, Director of Programs and Primary Family Counselor at Wellness Resource Center, Inc., from 1998-2005 and consulted with Caron Renaissance Treatment Program between 2006 and 2008, assisting in the development of their Family Restructuring Program. She has completed and is Certified by the Institute for Experiential Therapy at On-Site Institute, a Certified Alcoholism Counselor and Addiction Professional from Marymount Manhattan College, a Family Recovery Mentor, Recovery Residence Administrator in the state of Florida, a trained Peer Support Specialist, and a SMART Recovery Facilitator. She has served on the board of Alina Lodge/Little Hill Foundation, the Ian Mautner Foundation, and Congregation Kol Ami-a Reconstructionist Jewish Community.

Sharon has extensive experience working with individuals and families suffering from substance use disorders. She is also a person in recovery. Her focus is on innovative transitional protocols for clients as they move through the continuum of care, as well as ongoing guidance for family members as they heal. In addition to her skilled approach to recovery management, Sharon has extensive experience in program and staff development and works on an ongoing basis with humanitarian and community organizations, embracing Recovery Oriented Systems of Care and Peer Supportive Community Organizations.

Ariana Ciancio, MS, LMHC

Ariana received her MS degree in Mental Health Counseling from Nova Southeastern University in 1996 and now has over 20 years of experience in the addictions and mental health field. She is a licensed mental health counselor and is currently the Service Population Advocate for the Delray Police Department where she has created a program called CARES. Ariana has worked in both the public and private sectors at every level of care here in Florida and New Jersey. She worked for the National Counsel of Drug Dependence of New Jersey on their substance abuse and mental health initiative for 17 years, developing expertise in care coordination during that time. Ariana is currently a member of the Delray Beach Drug Task Force, the Sober Home Task Force, the Baker Act Task Force, and the Homeless Task Force in Delray Beach.

Shereena Coleman, BS

Ms. Coleman graduated from Rollins College where she earned a Bachelor of Science degree in Psychology with a concentration in Behavior Modification. She is Vice President of Business Facilitation & The Glades Region at the Business Development Board of Palm Beach County (BDB). In her role, Ms. Coleman consults one-on-one with companies sharing countywide resources available to assist with business growth, and she is responsible for outreach and interaction with business leaders in Palm Beach County and strategic community partners. Ms. Coleman also oversees the BDB's economic development initiatives as they pertain to the cities of Belle Glade, South Bay, and Pahokee, collaborating with community and business leaders in the Glades Region to assist in stimulating economic energy and enriching the vitality of the region's industries.

As part of the BDB Foundation, Ms. Coleman uses her knowledge of clinical mental health counseling to provide oversight of Project Opioid Palm Beach. In her role with the foundation, Ms. Coleman convenes top business, philanthropic and faith community leaders to find solutions to Palm Beach County's deadly opioid overdose epidemic. Prior to working for the BDB, Ms. Coleman was at Enterprise Florida, Inc. where she was relationship manager for each of the state's economic development offices for all 67 counties, utilizing her extensive knowledge of relationship management, finance, and economic development.

Philip K. Dvorak, MS, LMHC

Philip earned an MS degree in Counseling Psychology at PBA University in 2003. Pastor Phil has promoted the faith-based approach to recovery and has served in many pastorial positions since 1998. He has also served as a Primary Care Therapist and in other capacities at several PBC treatment centers, and he was the CEO of the Timothy Initiative, an international church-planting initiative, from February 2017-September 2018. Pastor Phil is currently the Senior Pastor at the Recovery Church in Lake Worth Beach. This church is reaching the recovery community and it is experiencing growth. He is also the Founder/President of the Recovery Church Movement located in Jupiter, Florida. The Recovery Church Movement is a network of Recovery Churches reaching and training those in early recovery to grow their faith and recovery. This initiative is a bridge between the 12-Step Fellowships and the Church, and it has a mission that includes starting, planting, and reproducing Recovery Churches.

John E. James, Jr., MHA

John has experience in management, sales, and finance. He completed an MHA degree at Florida Atlantic University in 2011 and has served as the Director of Public Health & Disaster Services at the PBC Medical Society since 2012. While serving in this position, he has helped lead the Healthcare Emergency Response Coalition (HERC) and the HERC Opioid Task Force. These initiatives require working collaboratively with multiple medical and public health organization to

coordinate and improve the delivery of healthcare emergency response services in the county. He recruits, trains and manages over 1500 medical, health, and non-medical/health volunteers to assist in disaster and relief efforts. He also contributes to the Care Coordination Program and Physician Wellness Program at the Medical Society. John is clearly an agent of change in the medical community.

Maureen Kielian, RHIA, CCS

Maureen holds a BS degree in Health Information Management from Temple University. She has a son in who became addicted to legally prescribed opioids which resulted in her becoming an activist against the overprescribing of these substances in Florida. Her activism led her to become either an officer or member of advocacy and support groups since 2009. In addition, Maureen provided testimony to the FDA regarding the proposed narcotic, Moxduo, and she is a past member of both the Advocacy and Steering Committee of the nationally known FedUP coalition. Currently, she is the President of Southeast Florida Recovery Advocates (SEFRA) whose mission is to assemble a forum through which education, prevention, treatment and advocacy groups align, working towards common objectives surrounding all aspects of recovery from substance use and related disorders.

Bill Lynch

Bill is a husband, father (natural, foster and adoptive), and grandfather committed to family, and involved with community and professional organizations. Bill's experience is personal. He has lived experience as the father of substance using daughter who passed away in 2019 from fentanyl poisoning after many years battling addiction as a resident of Palm Beach County. Professionally, Bill is a licensed professional engineer working as a Senior Consultant/Vice President with Jones Edmunds and Associates, Inc.

Bill now serves as the Vice Chairperson of PBC's Opioid Response Steering Committee assisting with updates to the Opioid Response Plan. The revised ORP will identify strategic areas of focus and action steps toward implementation of a person-centered, recovery-oriented system of care.

Bill also serves the Center for Child Counseling as Board Chair and has since 2013. Center for Child Counseling is building the foundation for playful, healthful, and hopeful living for children, families, and communities. We envision healthy, resilient children and families through ACEs-aware and trauma-informed communities.

P. Scott Rice MD, PhD, MBA, MS

Scott received his MS degree in Marine Sciences/Oceanography at the University of North Carolina-Chapel Hill in 1976, and then he completed both MD and PhD (Organic Chemistry) degree programs at the University of Hawaii in 1985. He has a diverse professional background which includes experience in the pharmaceutical industry, academia, drug litigation as a

consultant/expert witness, Chronic Care Management/care coordination, and the practice of Family Medicine. Scott came to PBC Florida in 2015, and subsequently completed an MBA degree in Health Care Management and Policy at FIU in 2017 to advance his vision of further contributing to the transformation and reform of health care, especially in the area of SUD treatment and recovery. He has served on the PBC Heroin Task Force and the Sober Home Task Force, and he is an active member of the PBC Medical Society where he is involved in multiple initiatives.

Micah Robbins

Micah received a BS in Elementary Education from the University of Maine. He is the Director of Special Projects for the Palm Beach County Behavioral Health Coalition. He is the volunteer convener of the weekly Recovery Awareness Partnership a coalition task force specifically working on recovery efforts in the county. He has enjoyed a lengthy career in the prevention and coalition field. Prior to coming to Palm Beach County in 2012, he was Executive Director for Drug Free Youth in Town in Miami, a school based substance prevention program that served 5500 middle and high school students in Dade and Broward County. Micah has also been a sought after group facilitator with an extensive background in experiential group facilitation, public speaking and host of forums, town halls, political debates, and over 20,000 direct group facilitation hours over the last 27 years.

Michael D. Schlossman, JD

Michael received his JD degree from the New York Law School in 1992, and he is also an ordained minister. Michael has a diverse background, with professional experience beginning in the entertainment industry and extending into the SUD treatment domain. He was located primarily in the NYC area during his highly successful entertainment career but relocated to South Florida in 2011. Since his arrival here, he has continued his success by entering the SUD treatment industry. Michael has been deeply involved in different capacities with multiple highly respected treatment centers in the area. He has been a leader of both clinical and non-clinical programs and is currently the co-owner, CEO & General Counsel for Sober Living in Delray Beach. This facility has a goal of providing a safe, supportive, substance-free environment for recovering men and women who require a structured environment as they re-enter the community.

Pastor Rae Whitely

Pastor Whitely attended Tallahassee Community College and Palm Beach Community College for Business Management in 1993 and 1994, respectively, and attended HW International Ministries in Ocala, Florida emerging with majors in Pastoral Counseling and Theology. Mr. Whitely has extensive experience working to organize and develop low-income communities and assist residents, organizations, municipalities and legislators to participate in community development. His expertise includes, *inter alia*: 28 years of experience in direct community/economic development, financial counseling to businesses and evaluation of community/economic

development investments; Campaign planning; Financial, Programmatic and Organizational Structure evaluation; Grass-roots Community Organization; Community and Economic revitalization; Faith-based collaboration; Meeting facilitation and he is the Founder and President of Black Votes Matter, and Executive Director of several non-profit organizations and CDCs.

Pastor Whitely is currently the President and CEO of Boynton United 2 Bury the Violence, an organization that brings awareness and responsibility to violence in our community. He is the founder of The Children's Oasis International, Inc., and he is spokesperson for the Boynton Beach Coalition of Clergy as well as a member of the Palm Beach County Clergy Alliance. Pastor Whitely is an Ordained Minister at Healing Hands Ministry and serves and holds positions on several boards, including various Religious Advisory Boards, UNIFY Criminal Justice Commission, and he has worked with Community Agencies to bring about positive change in the lives of people.

EX OFFICIO MEMBERS

Belma Andric, MD, MPH

Dr. Andric is currently Chief Medical Officer and Vice President and Executive Director of Clinic Services of the Health Care District of Palm Beach County. Dr. Andrić is responsible for the overall medical, administrative and regulatory leadership of the C. L. Brumback Primary Care Clinics, the Health Care District's Federally Qualified Health Centers. Dr. Andrić oversees operations of the Palm Beach County Trauma System, Trauma Agency, Aeromedical Program and Pharmacy Program. In addition, Dr. Andrić is responsible for quality and patient safety across the public health care system and supervises the Health Care District's Quality and Patient Safety departments, with indirect oversight of the District's other physician leaders.

Ann Berner

Ann is currently CEO for Southeast Florida Behavioral Health Network, the managing entity for the Department of Children & Families, since its inception in 2012 and is charged with overseeing $62 million annually in publicly-funded substance abuse and mental health services. With over 20 years' experience with DCF, including District Administrator for the Lakeland area and Florida's Statewide Director for Economic Self-Sufficiency (Medicaid eligibility, SNAP and TANF Cash Assistance), she embraces extending a hand-up to our vulnerable neighbors in need and those individuals in crisis. She recognizes the importance of cultivating effective working relationships between the local behavioral health provider network and Child Welfare, Juvenile Justice, the State's Psychiatric Hospitals, primary health care providers, and both local government & law enforcement agencies. Ann is passionate about establishing "unconditional care" as the standard for behavioral health services; promoting the values of a Recovery Oriented system of care, and committed to improving the trajectory for those individuals at the greatest risk of not achieving their full potential.

Alan S. Johnson

Alan is currently Chief Assistant State Attorney for the 15th Judicial Circuit. As an Assistant State Attorney for 25 years, Mr. Johnson has prosecuted numerous high profile felony cases. In 2016, Mr. Johnson was asked to lead the State Attorney's Sober Homes Task Force, established by the Florida Legislature, to conduct a study aimed to strengthen investigation and prosecution of criminal and regulatory violations within the substance abuse treatment industry. In 2017, the Task Force recommended significant legislative changes in the areas of marketing, patient brokering and treatment industry standards. These initiatives passed unanimously and were adopted into law on July 1, 2017. In its first 18 months of operation, the law enforcement side of the Task Force investigated and charged 48 individuals for violating fraud and patient brokering laws.

PALM BEACH COUNTY

John Hulick, MS

John currently leads the opioid response for Palm Beach County. He is also responsible for policy and service planning, as well as the coordination and delivery of addiction recovery, treatment and prevention services in the County. Prior to locating to Florida, John served as Managing Partner of New Jersey-based In Depth Solutions, LLC, where he dedicated his work and human services expertise to assisting private and public sector corporations in New Jersey and nationally achieve their desired strategic growth and public policy aims. John served as Governor Christopher J. Christie's Policy Advisor for Human Services, Children and Families and was nominated by him, and confirmed by the New Jersey Senate, to also serve as Executive Director, Governor's Council in Alcoholism and Drug Abuse. There, he helped to re-tool drug courts as well as led efforts to combat the state's heroin epidemic and plan addiction services.

PAST MEMBERS

Andrew Burki, MSW

Andrew holds a Master in Social Work degree from Florida Atlantic University and is a macro level social worker. He is a person in long-term abstinence based recovery since 2001. Andrew currently serves as the Chief Public Policy Officer for Hanley Foundation where he is responsible for the execution of strategies designed to advance Hanley Foundation's public policy goals related to the prevention and treatment of substance use disorders, with a focus on initiatives for young people. The Foundation's mission is to provide prevention and education programs for parents, caregivers, and school-age children and is a leader in adolescent and emerging adult support. Andrew is a Board member of the Young People in Recovery as well The Bridge Way School, Philadelphia's recovery high school. Andrew served as a member of the Florida Sober Homes Task Force and participated on advisory panels for the federal Office of National Drug Control Policy and the Substance Abuse and Mental Health Services Administration under last two presidential administrations.

Sarah B. Gentry, MS, LMHC, CAP, CRRA

Sarah completed her MS degree in Mental Health Counseling at PBA University in 2001. She is the owner of Gentry Counseling, Inc., and specializes in working with clients and families with chemical dependencies, eating disorders, codependency, trauma, and family of origin issues. She has extensive experience in the treatment industry with areas of concentration ranging from trauma and chemical dependency treatment, to gender-specific issues, creative healing, and dual diagnosis treatment. Sarah is a nationally noted therapist and manager, and she is also well-known in the industry as a leader for her integrity, ethical treatment, and clinical excellence. As a consultant, she provides treatment facilities and organizations with a multitude of services, including ethical leadership and clinical programming.

Joshua S. Horton, JD

Joshua earned his JD degree from the University of Mississippi School of Law in 2017. Following an internship, he came to PBC to serve as an associate attorney in the 15th Judicial District Public Defender Office. Then in December 2018, he joined the Romano Law Group in Lake Worth Beach, Florida. Working closely with his group colleague, attorney Susan Ramsey, he has been litigating sober home fraud, wrongful death and medical malpractice cases as they relate to SUDs and the criminal activity surrounding it. Joshua is also litigating multi-district opioid epidemic lawsuits by representing municipalities against pharmaceutical companies in federal court in Ohio. In addition, he is defending misdemeanor, felony, and juvenile criminal cases along with drafting interrogatories, Requests for Production, Requests for Admission, Complaints, Motions, and other Legal Memoranda.

Matthew J. Mossburg, BS

Matthew earned a BS degree in Economics at Georgetown University in 1992. He is a results-oriented political leader with has over 30 years of experience in analyzing problems and identifying solutions, enhancing business and program performance, and ensuring compliance with standard procedures and regulations. Matthew was Advocate and former state delegate who has led and assisted in the passage of multiple legislative and executive initiatives, and commentator, writer, and coalition-builder in the addiction and recovery as well as political communities for policy expertise and ability to build and maintain collaborative relationships. He also has comprehensive experience in business solution development, consulting, community relations and development, and program management within healthcare, manufacturing, and legislative settings.

Clarice Redding-Louis

Clarice Redding Louis graduated from Florida Atlantic University with a Bachelor of Arts degree in Intercultural Communication as well as a Master of Education Leadership degree. She is currently pursuing an Educational Doctorate in Organizational Leadership from Nova Southeastern University. Clarice is currently the Chief Recovery Community Officer at Hanley

Foundation where her focus is on establishing Hanley Foundation's legislative priorities, assisting in opening a recovery community center, supporting the update of Palm Beach County's response to the opioid crisis, and overseeing the design of evidence-informed practices to help individuals sustain long-term recovery. She will also assist the Chief Development Officer with administering the Lifesaver Scholarships and securing grants for the Foundation.

Familiar with the socioeconomic, educational, and political deficits plaguing minorities in Palm Beach County, Mrs. Redding Louis seeks to close this gap of disparity, by helping to offer more access to opportunities for advancement. Previously, Clarice was the Director of Community Services for Vita Nova, Inc. in West Palm Beach, a human services organization serving 200 families. During her time there, she oversaw the logistics management, team infrastructure, program design, grants management and community outreach. Additionally, she is a current member of Leadership Palm Beach County's Engage Class of 2022 and Vice President of the LupieGirl, an organization that provides support to families affected by Lupus and other chronic illnesses.

Nikki Soda, BA

Nikki earned a BA degree in communications from the University of Tampa. She is an enthusiastic development director experienced in planning and managing large events and fundraisers. As an organized leader, Nikki enjoys building strong, fun and effective teams which involves her skills in event oversight, team management, best practices for revenue growth, budgeting, training and managing alumni teams, and achieving budget goals. She is currently the Membership Development Officer for the National Association of Addiction Treatment Providers (NAATP) which includes communicating the advantages of membership, services, and programs to prospective members, executing marketing strategies, enhancing membership engagement, developing community outreach, attending and organizing Regional Round Table events, increasing membership using innovative methods, being the Social Media Manager, and building and creating awareness around NAATP.

APPENDIX G

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA)

CENTER FOR SUBSTABCE ABUSE TREATMENT

RECOVERY-ORIENTED SYSTEM OF CARE (ROSC) DEFINITION

Definition of Recovery-Oriented Systems of Care (ROSC)

A ROSC is a coordinated network of community-based services and supports that is person-centered and builds on the strengths and resilience of individuals, families, and communities to achieve abstinence and improved health, wellness, and quality of life for those with or at risk of alcohol and drug problems.

Values Underlying a ROSC

Person-centered approach: A ROSC centers services and supports around the needs, preferences and strengths of individuals. A ROSC recognizes there are many pathways to recovery, including treatment, mutual aid groups, faith-based recovery, cultural recovery, natural recovery, medication-assisted recovery, and others. A ROSC offers choice by providing a flexible menu of services and supports designed to meet each individual's specific needs.

Self-directed approach: A ROSC encourages and supports individuals in exercising the greatest level of choice over their service and support options and responsibility for their recovery.

Strength-based approach: A ROSC identifies and builds on the assets, strengths, resources, and resiliencies of the individual, family, and community, rather than emphasizing needs, deficits, and pathologies.

Participation of family members, caregivers, significant others, friends, and the community: A ROSC acknowledges the role that family members, caregivers, significant others, friends, and other allies and the community can play in the recovery process. These individuals are incorporated, whenever appropriate, in recovery planning and recovery support. Additionally, a ROSC recognizes that these individuals may have their own needs for supports or services.

Operational Elements of a ROSC

Collaborative decision-making: A ROSC provides information to individuals and families so that they can make decisions and choices regarding their care. Individuals are empowered to collaborate with professionals, peers, and other formal and informal service providers to direct their own recovery to the greatest extent possible.

Individualized and comprehensive services and supports: A ROSC offers a broad array of supports to meet the holistic needs of the individual. Services are designed to support recovery across the lifespan, with the understanding that needs and resources shift and change with age and life stage, as well as over the course of recovery. Services and supports should be gender-specific, culturally relevant, trauma-informed, family-focused, and appropriate to the person's stage of life and stage of recovery.

Community-based services and supports: A ROSC is responsive to and draws on the resources of the community. A ROSC offers a range of services and supports by drawing on the strengths, resilience, and resources of the community, including professional and non-professional organizations and groups, such as community-based service agencies, recovery community organizations, faith-based organizations, schools, civic groups, and others.

Continuity of services and supports: A ROSC coordinates services and supports to ensure ongoing and seamless connections within and among various organizations for as long as the individual needs them.

Multiple stakeholder involvement: A ROSC involves all segments of the community – including treatment and recovery professionals, policy-makers, administrators, people in recovery, family members, representatives from allied health and social service agencies, community leaders, and others with concern for substance use disorder recovery. It promotes trust and transparency in the design and delivery of services and supports.

Recovery community/peer involvement: A ROSC includes members of the recovery community in the design of systems, services, and supports. People in recovery and their family members, caregivers, significant others, friends, and other allies are included among decision-makers, and have a meaningful role in service design, provision, and quality improvement. Peer-to-peer recovery support services are included in the array of services offered.

Outcomes-driven: A ROSC measures outcomes to improve the systems of care. The **s**ystems, service design and quality are driven by performance data that include, at a minimum, the following outcome measures:

For the individual:

- abstinence, which includes adherence to a medication-assisted recovery regimen
- education
- employment
- reduced criminal justice involvement
- stability in housing
- improved health
- social connectedness
- quality of life

For the system:

- increased access/capacity
- proper placement and quality of care
- retention
- perception of care
- cost-effectiveness
- use of evidence-based practices

Adequately and flexibly funded: A ROSC leverages and coordinates Federal, state, county, and municipal funding. Funding is maximized to allow flexibility in providing a menu of services options.

APPENDIX H
LANGUAGE DICTIONARY

Language Dictionary: A Key to Common Terms and Their Definitions

The Language Dictionary is the beginning of an iterative process that will help shift language to being person-first, minimize and eventually eliminate stigma and serve as a resource for common terminology.

Addiction Stabilization Unit (ASU) – An addiction stabilization unit (or, addiction stabilization facility (ASF")) is a facility, such as the one located at JFK Hospital, where individuals who have been brought into the emergency department (ED) can be brought for observation following an overdose and where they can be assessed for further treatment, such as in-patient hospitalization, psychiatric evaluation that may lead to a voluntary or involuntary (Baker Act) psychiatric hospitalization, referral or placement in an in-patient detoxification program or referral for outpatient treatment.

Assessment – "An ongoing process used to determine the medical, psychological, and social needs of individuals with substance-related conditions and problems. It can take the form of biological assays (e.g., blood or urine samples), as well as clinical diagnostic interviewing and the completion of self-report measures to determine the presence of a substance use disorder or other psychiatric condition, and other symptoms and challenges with the ultimate goal of developing a fully informed and helpful treatment and recovery plan."[1]

Behavioral Health is "an umbrella term that refers to your overall wellbeing and how it is impacted by your behaviors"[2] While behavioral health and mental health tend to overlap, and many organizations substitute one term for the other, distinct differences do exist between the two. The U.S. Department of Health and Human Services defines mental health as a person's psychological, emotional, and social wellbeing. And while some mental health issues may be impacted by behavior, many mental health disorders have neurological or biological causes, meaning that simply changing a person's behavior may not cure them of that illness.[3]

Some examples of mental health disorders include:[4]

- Bipolar disorder.
- Schizophrenia.
- Depression.

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[1] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[2] https://www.projectknow.com/drug-addiction/behavioral-health/ (Extracted 12/22/2020).

[3] Grant, J.E., Potenza, M.N., Weinstein, A. & Gorelick, D.A. (2010). Introduction to Behavioral Addictions. *American Journal of Drug and Alcohol Abuse. 36(5), 233–241.* U.S. Department of Health and Human Services. (n.d.). *What Is Mental Health?* Bienvenu, O.J., Davydow, D.S. & Kendler, K.S. (2011). Psychiatric 'diseases' versus behavioral disorders and degree of genetic influence. *Psychological Medicine, 41(1), 33–40.*

[4] U.S. Department of Health and Human Services. (n.d.). *What Is Mental Health?* Bienvenu, O.J., Davydow, D.S. & Kendler, K.S. (2011). Psychiatric 'diseases' versus behavioral disorders and degree of genetic influence. *Psychological Medicine, 41(1), 33–40.*

- Generalized anxiety.
- Social anxiety.
- Attention-deficit/hyperactivity disorder (ADHD).

Examples of behavioral health disorders include:[5]

- Substance abuse disorders.
- Eating disorders.
- Behavioral addictions.

Care Coordination "involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care. This means that the patient's needs and preferences are known ahead of time and communicated at the right time to the right people, and that this information is used to provide safe, appropriate, and effective care to the patient."[6]

Coaching is a way of interacting that builds confidence and competence in the person being coached. It is a style of communication that allows for empowerment and self-realization.

Cognitive Behavioral Therapy (CBT) "is a **psycho-social intervention that aims to improve mental health.** CBT focuses on challenging and changing unhelpful cognitive distortions (e.g. thoughts, beliefs, and attitudes) and behaviors, improving emotional regulation, and the development of personal coping strategies that target solving current problems."[7] It is also defined as: "A prevalent type of talk therapy (psychotherapy) that involves working with a professional to increase awareness of inaccurate or negative thinking and behavior and to learn to implement new coping strategies."[8]

Co-occurring Disorders means having both a mental health and substance use disorder or, phrased differently, the "occurrence of two disorders or illnesses in the same person, also referred to as co-occurring conditions or sometimes dual diagnosis." [9]

Community-based Treatment and Services are those services and supports that occur in the person's community.

Damp Housing: Housing where tenants do not need to be "clean" when entering the program but are expected to be actively working on recovery from substance use problems.[10]

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[5] Id.

[6] https://www.ahrq.gov/ncepcr/care/coordination.html. (Extracted 12/22/2020).

[7] en.m.wikipedia.org/wiki/Cognitive_behavioral_therapy (Extracted 12/22/2020).

[8] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[9] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[10] https://www.heretohelp.bc.ca/visions/housing-and-homelessness-vol4/housing-glossary (Extracted 12/30/2020).

Deep End Treatment is residential, in-patient long term care.

Detoxification or detox "is the medical process focused on treating the physical effects of withdrawal from substance use and comfortably achieving metabolic stabilization; a prelude to longer-term treatment and recovery."[11]

Employment is an indicator for recovery wellness and research shows that it can be part time, full time or volunteer as long as it is fulfilling for the person engaged in the work activities.

Evidence-based Practices refers to "patient care informed through the integration of clinical expertise and best available clinical evidence from systematic research."[12]

Harm reduction "is a set of policies and practices intended to reduce the negative effects of drug and alcohol use. Harm reduction programs exist for several types of drugs, including opioids, alcohol, stimulants, Ecstasy, and marijuana. They range from needle exchange sites to managed alcohol programs to drug-testing kits at music festivals."[13]

Intensive Out-Patient Treatment is "time limited, intensive, non-residential clinical treatment that often involves participation in several hours of clinical services several days per week. It is a step below partial hospitalization in intensity."[14]

Intervention is "the act of interfering with the outcome or course especially of a condition or process (as to prevent harm or improve functioning)."[15]

Maintenance means the intentional use of MAT without a taper as a means of resolving a substance use disorder (e.g. methadone at scale for the past 60 years or so in the U.S.).

Mental Health "includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices."[16]

Moderation includes the non-problematic recreational use of drugs and/or alcohol (e.g. over 80% of Americans age 18 or older who have reported trying alcohol at some point in their life but do not meet the criteria for an Alcohol use disorder).

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[11] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[12] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[13] https://americanaddictioncenters.org/harm-reduction# (Extracted 12/29/2020).

[14] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[15] https://www.merriam-webster.com/dictionary/intervention (Extracted 12/23/2020).

[16] https://www.mentalhealth.gov/basics/what-is-mental-health (Extracted 12/23/2020).

Motivational Interviewing is a "clinical approach that helps people with mental health and substance use disorders and other chronic conditions such as diabetes, cardiovascular conditions, and asthma make positive behavioral changes to support better health by helping them to explore and resolve ambivalence about changes. The approach upholds four principles: expressing empathy and avoiding arguing; developing discrepancy; rolling with resistance; and supporting self-efficacy (client's belief s/he can successfully make a change). This is non-directive approach to counseling that attempts to help patients resolve ambivalence about changing substance use and mobilize motivation and action toward healthier change."[17]

Neutral Care Coordination is services provided by a non-conflicted, neutral body functioning as a single point of entry for referrals to providers. Services include assessment, initial level of care determination, referral, care coordination across a continuum of clinical and non-clinical care, as well as prior authorization and payment of certain care. NCC values individualized care and individual choice in development of care plans. Individualized care plans are the primary drivers of care engagement and are aimed at achieving successful, seamless movement along a continuum of clinical care through non-clinical recovery support and social services to improve long-term recovery outcomes.

Peer Support can be volunteer or paid and "offer[s] valuable guidance and connection to individuals in recovery through the process of sharing their own experiences in recovery from substance use disorder."[18]

Prevention "is the act of stopping something or ensuring something does not happen."[19]

Recovery Capital Index™ (RCI) "is a holistic, person-centered metric that tracks wellness of the whole person."[20]

Recovery Capital encompasses "the resources (social, physical, human and cultural), which are necessary to begin and maintain recovery from substance use disorder."[21]

Recovery means the intentional non-use of mind-altering substances (i.e. drugs and alcohol) as a means of resolving a substance use disorder. It is worth noting that this includes prescribed use of MAT on a taper even if the particular MAT drug involved is abuse-able.

Recovery Community Center (RCC) "A center or hub that organizes recovery networks regionally and nationally to facilitate supportive relationships between individuals in recovery as well as family and friends of people in recovery. Centers may provide advocacy training, peer

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[17] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[18] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[19] https://www.yourdictionary.com/prevention (Extracted 12/23/2020).

[20] WeFaceItTogether.org

[21] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

support organization meetings, social activities, job linkage, and other community based services."[22]

Recovery Community Organization (RCO) "An independent, non-profit organization led and governed by representatives of local communities of individuals in recovery from a substance use disorder."[23]

Recovery-oriented System of Care (ROSC) is "a coordinated network of community based services that involve a strengths-based and personalized approach to recovery and increases in quality of life."[24]

Recovery Homes are "alcohol- and drug-free living facility for individuals recovering from alcohol or other drug use disorders that often serves as an interim living environment between detoxification experiences or residential treatment and mainstream society. Also known as Sober Houses, Sober Living Houses (SLHs), Sober Living Homes, or Sober Living Environments." [25]

Social Capital "is the effective functioning of social groups through interpersonal relationships, a shared sense of identity, a shared understanding, shared norms, shared values, trust, cooperation, and reciprocity. Social capital is a measure of the value of resources, both tangible (e.g., public spaces, private property) and intangible (e.g., actors, human capital, people), and the impact that these relationships have on the resources involved in each relationship, and on larger groups. It is generally seen as a form of capital that produces public goods for a common purpose."[26]

Substance Use Disorder is a "clinical term describing a syndrome consisting of a coherent set of signs and symptoms that cause significant distress and or impairment during the same 12-month period."[27]

Supported Employment "is founded on the belief that anyone can work if they are provided the right supports. Individuals who have not traditionally participated in competitive employment based upon their disability are the primary focus of Supported Employment. The expected outcome of Supported Employment is that individuals will maintain the appropriate level of employment (either full/part time) based upon their skills, interest and abilities."[28]

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[22] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[23] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[24] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[25] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[26] https://en.wikipedia.org/wiki/Social_capital (Extracted 12/23/2020).

[27] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[28] https://resourcecenter.org/services/manufacturing-services/employment-services/community-based-employment/supported-employment/ (Extracted 12/23/2020).

Treatment is the "management and care of a patient to combat a disease or disorder. Can take the form of medicines, procedures, or counseling and psychotherapy."[29]

Wet Housing is "housing where tenants are not expected to abstain from using alcohol and other drugs, and where entering a rehabilitation program is not a requirement. Tenants have access to recovery services and get to decide if and when they use these services. Wet housing programs follow a harm reduction philosophy."[30]

Wrap-around Services "is an intensive care coordination and management process focused on building a team comprised of formal (professionals) and informal (natural) supports."[31]

[29] https://www.recoveryanswers.org/addiction-ary/ (Extracted 12/23/2020).

[30] https://www.heretohelp.bc.ca/visions/housing-and-homelessness-vol4/housing-glossary (Extracted 12/30/2020).

[31] http://www.socflorida.com/documents/professionals/Wraparound%20in%20Florida%20White%20Paper.pdf.