

Success Story:  
Overdose Fatality  
Review Use of  
Overdose Detection  
Mapping  
Application Program  
Data



# Presenters

- **Mallory O'Brien, MS, PhD**, Senior Policy Advisor, Bureau of Justice Assistance (BJA) COSSAP and Consultant, IPA, Centers for Disease Control and Prevention (CDC)
- **Lauren Savitskas, MPH**, Senior Research Associate, Institute for Intergovernmental Research (IIR)
- **Marquis M. Johnson, MPH**, Overdose Detection Mapping Application Program (ODMAP) Coordinator, Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA)
- **Ali Burrell, MPH**, ODMAP Program Manager, Washington/Baltimore HIDTA
- **Kimberly L. Reilly, MA, LPC**, Alcohol and Drug Coordinator, Ocean County, New Jersey, Health Department
- **Captain Jason Piotrowski**, Office of Drug Monitoring and Analysis, New Jersey State Police



# Agenda

- Overview of overdose fatality review (OFR)
- Overview of ODMAP
- Case study of the use of ODMAP data by local OFR

# OFR Purpose and Value

- Overdoses are preventable
- Identify systems gaps: missed opportunities for prevention and intervention
- Design innovative community-specific prevention strategies

# Overdose Fatality Review Overview

- OFRs involve analysis and **review of aggregate data** to understand overdose trends, select cases to review, and provide context for case findings and recommendations
- OFRs involve a series of **confidential individual death reviews** by a multidisciplinary team to effectively **identify system gaps and innovative community-specific** overdose prevention and intervention strategies
- These recommendations are presented to a governing committee that supports and provides resources for implementation framework for accountability for action

### Shared understanding

- OFRs increase members' understanding of area agencies' roles and services, as well as the community's assets and needs, substance use and overdose trends, current prevention activities, and system gaps

### Optimized capacity

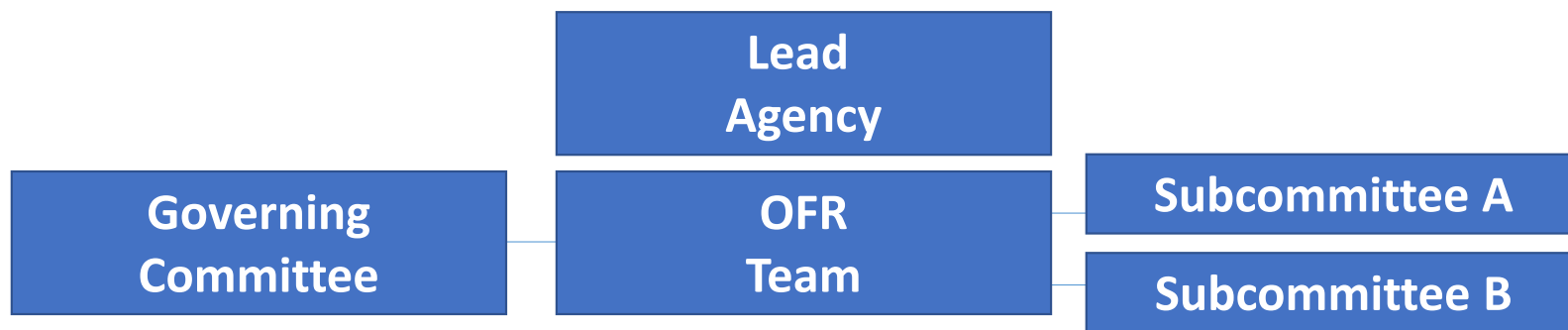
- OFRs increase the community's overall capacity to prevent future overdose deaths by leveraging resources from multiple agencies and sectors to increase system-level response

### Shared accountability

- OFRs continually monitor local substance use and overdose death data, as well as recommendation implementation activities. Status updates on recommendations are shared at each OFR team meeting and with a governing committee, reinforcing accountability for action.

# "SOS" Process

# OFR Structure



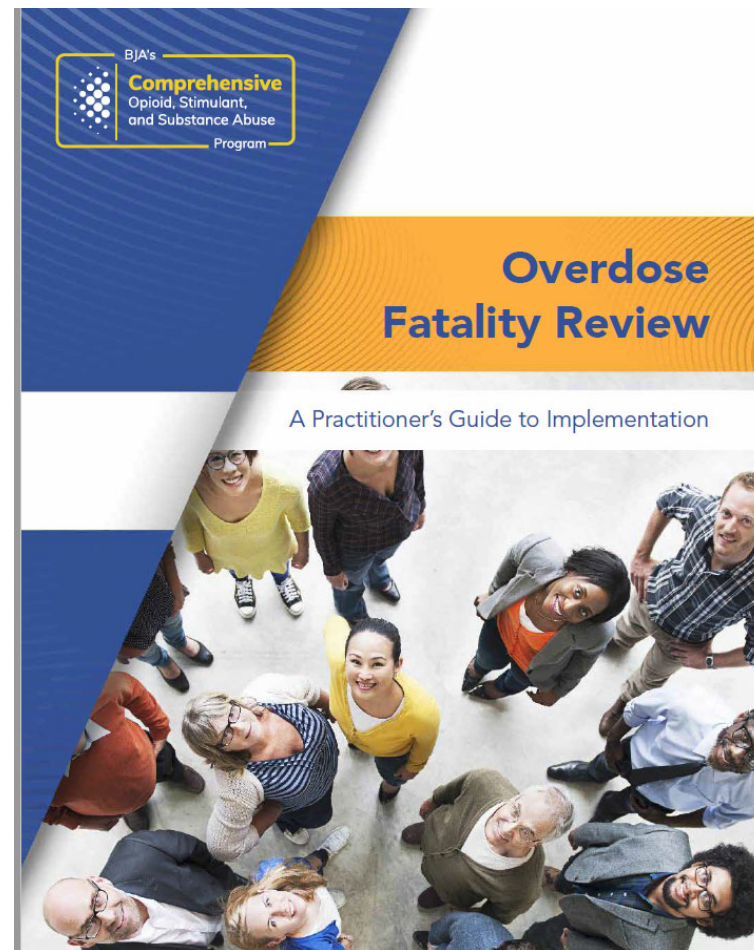
**Lead Agency:** Oversees the OFR team coordination and provides administrative support

**Governing Committee:** Supports and provides resources to implement recommendations generated by case reviews

**OFR Team:** Multidisciplinary team that reviews a series of individual deaths to identify system-level missed opportunities for prevention and intervention

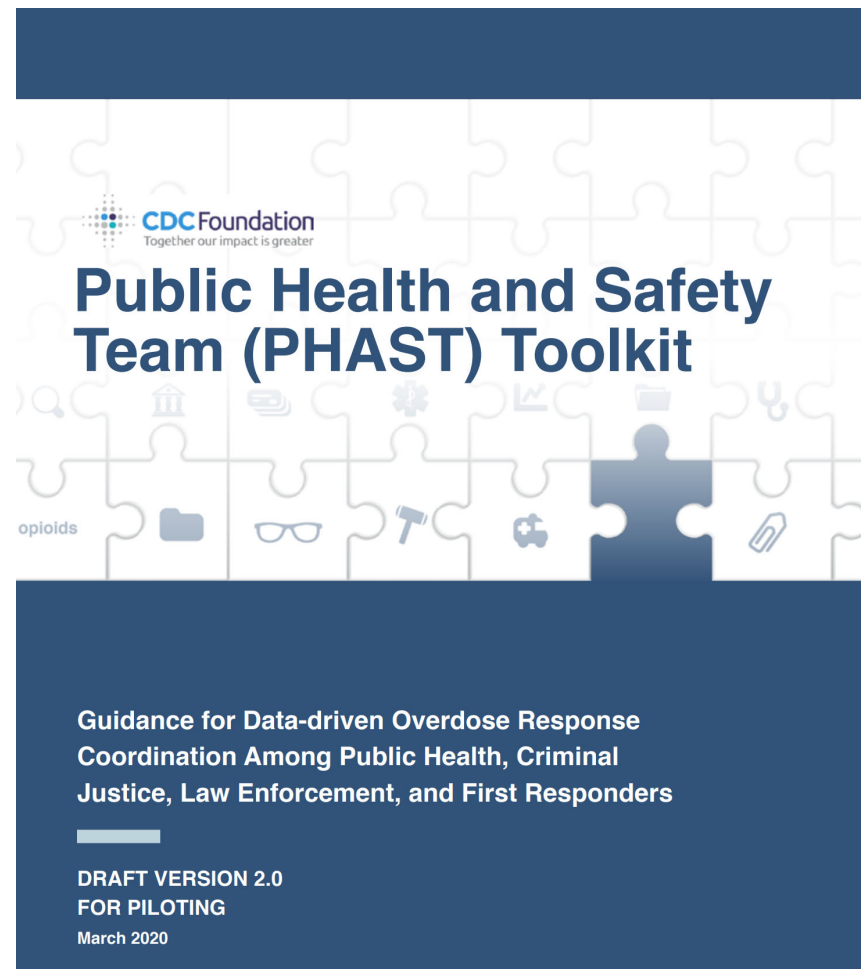
**Subcommittee:** Focuses attention on a recommendation or need, such as case selection

***Overdose Fatality  
Review:  
A Practitioner's  
Guide to  
Implementation***





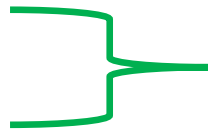
# PHAST Toolkit



# ODMAP Data Within an OFR

## Meeting Agenda

1. Opening Remarks and Introduction
2. Goals and Ground Rules
3. Confidentiality
4. Case Presentation
5. Member Report-Outs
6. Group Discussion
7. Case and Timeline Summarized
8. Formulate Recommendations
9. Summarize and Adjourn

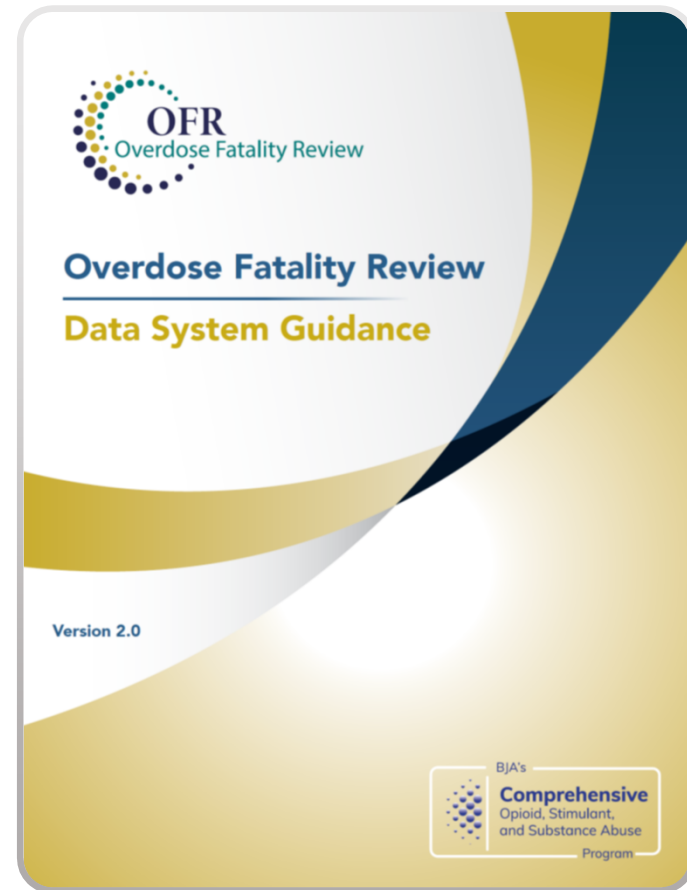


## 1. Opening Remarks and Introduction

- Members' introductions
- Updates from previous meeting
- Upcoming events
- Data presentation:
  - At the beginning of the year, present an overview of the prior year's fatal and nonfatal overdoses
  - At each meeting:
    - Year-to-date, number of deaths
    - Since last meeting, the number of deaths
    - Prior year same time frame, number of deaths
    - (Any other aggregate data available)
- Review case selection criteria
- Other announcements

# Data Collection: OFR Data System

- Decedent case information
- County profile
- Recommendation monitoring
- Next-of-kin interview



# Decedent Case Information: ODMAP Specific

## Was the death possibly connected or related to a contaminated/tainted batch or a community spike in overdoses?

Response options:

- No
- Yes

Definition: Indicates whether this overdose death was likely related to a contaminated/tainted batch, pressed counterfeit pill, or a significant community spike in overdoses

Guidance: If the death was around the time of an identified spike in cases, for example, identified by the ODMAP platform, or if there was a known batch of contaminated/tainted substance in the community or from a pressed counterfeit pill, select “yes”

Reference: ODMAP, [www.odmap.org](http://www.odmap.org)

# County Profile: ODMAP Specific

## Level of ODMAP reporting at the county level

Response options:

- No—None of the jurisdictions report into ODMAP
  - Yes, partial—Some of the jurisdictions report some suspected cases into ODMAP
  - Yes, all—All jurisdictions are required to report all suspected cases into ODMAP
  - Yes, unsure how many jurisdictions are reporting cases into ODMAP
- Definition: Indicates the level of ODMAP reporting at the county level
  - Guidance: Visit [www.odmap.org](http://www.odmap.org) and scroll down to the section on participating agencies. Select state and county.
  - Reference: Overdose Detection Mapping Application Program, [www.ODMAP.org](http://www.ODMAP.org)

# ODMAP

**OVERDOSE DETECTION  
MAPPING APPLICATION PROGRAM**



**B** UNIVERSITY OF  
1925 **BALTIMORE**  
Center for Drug Policy and Prevention

*Washington/Baltimore*

**HIDTA**   
HIGH INTENSITY DRUG TRAFFICKING AREA

# Real-time Public Health and Safety Data Collaboration

- Public health data/solutions alone **cannot** “solve” the current epidemic
- Public safety data/solutions alone **cannot** “solve” the current epidemic
- Retroactive data alone **cannot** drive life-saving decisions
- Collaboration **and** real-time data helps save lives and drive short and long-term decisions



**ODMAP**  
OVERDOSE DETECTION  
MAPPING APPLICATION PROGRAM

# What is ODMAP?

ODMAP is a **free**, web-based tool that provides near **real-time surveillance** of suspected overdose events to **support public safety and public health** efforts to mobilize an **immediate response** to overdose events



**ODMAP**  
OVERDOSE DETECTION  
MAPPING APPLICATION PROGRAM



# Current ODMAP Engagement

**Number of participating states:** 50, DC, and Puerto Rico

**Number of participating agencies:** over 3,900

**Number of ODMAP users:** Over 26,000

**Number of states with statewide implementation:** ≈23

**Number of suspected overdoses entered:** over 1.26 million

# ODMAP 101

How to engage with and use ODMAP

# ODMAP Agency Eligibility

- Federal, State, Local, and Tribal
  - Law Enforcement/Criminal Justice Personnel (including medical examiners/coroners)
  - Public Health Personnel
- Licensed First Responders (Fire/EMS)
- Hospitals with Emergency Departments
  - Excludes associated researched units commonly seen with universities
- All agencies **must sign** a Participation Agreement prior to gaining access, it outlines the ODMAP Policies and Procedures

# Overdose Event Data Entry Methods

The screenshot displays the ODMAP data entry interface, which is overlaid on a map of the United States. The interface is divided into several sections:

- ENTER LOCATION:** Includes radio buttons for "Use My Devices Location", "Use An Address", and "Use Coordinates". The "Use An Address" option is selected, with a text input field containing "Ex: 123 Anyroad, Anyplace, CA 12345". Below this are fields for "Latitude" (Ex: 35.046230) and "Longitude" (Ex: 176.0985405).
- CASE INFORMATION:** Contains several dropdown menus: "Case Number", "Age", "Gender", "Primary Suspected Drug", "Victim Was Taken to the Hospital", "Part of Multiple Overdose Victim Incident", "Motor Vehicle Involved", and "Naloxone Administered By". There is also a list for "Additional Suspected Drug" with options: Alcohol, Benzodiazepine, Cocaine, Crack, and Fentanyl.
- NON-FATAL OVERDOSES:** Features four buttons: "Naloxone Administration Unknown", "Naloxone Not Administered", "Single Dose (2mg IN or 0.4mg IV) Naloxone Administered", and "Multiple Doses (>2mg IN or >0.4mg IV) Naloxone Administered".
- FATAL OVERDOSES:** Features four buttons: "Naloxone Administration Unknown", "Naloxone Not Administered", "Single Dose (2mg IN or 0.4mg IV) Naloxone Administered", and "Multiple Doses (>2mg IN or >0.4mg IV) Naloxone Administered".

Suspected overdose cases can be entered into the ODMAP system in **three** ways:

- Manual entry through the secure website (ODMAP is mobile friendly)
- ODFORM (for select law enforcement agencies)
- Application Programming Interface (API)

# Overdose Event Data Points Collected by ODMAP

- Each case entry **must** include:
  - Date and Time
  - Location
  - Outcome (fatal/non-fatal)
  - Naloxone Administration
- Agencies can add additional information, including:
  - Suspected drug
  - Demographics (age and gender)
  - Transported to hospital

# Real-time Data Collection through APIs

- An API allows for the **direct, automated integration** of the two software systems
- ODMAP utilizes a REST (Representational State Transfer) API, combined with a JSON payload to transfer data between both systems
- This is a combination of modern technology that is **developer friendly** and **compatible** with **nearly all** programming languages
- The API requires some set up at the beginning but does not require any changes to an agencies current data entry protocol

# ODMAP and HIPAA

- ODMAP is not considered a “system of record” – it collects location, date/time, fatality status, and naloxone administration
- The information captured by ODMAP is not considered PHI - the location is translated into a geo-located point where an overdose occurred without any other information about a person
- W/B HIDTA and ODMAP do not retain any address information within the platform or on the server (they are deleted)
- ODMAP Zoom function is restricted to a zoom Level ID: 15 (scale of 1:18055.95)

# ODMAP Tools

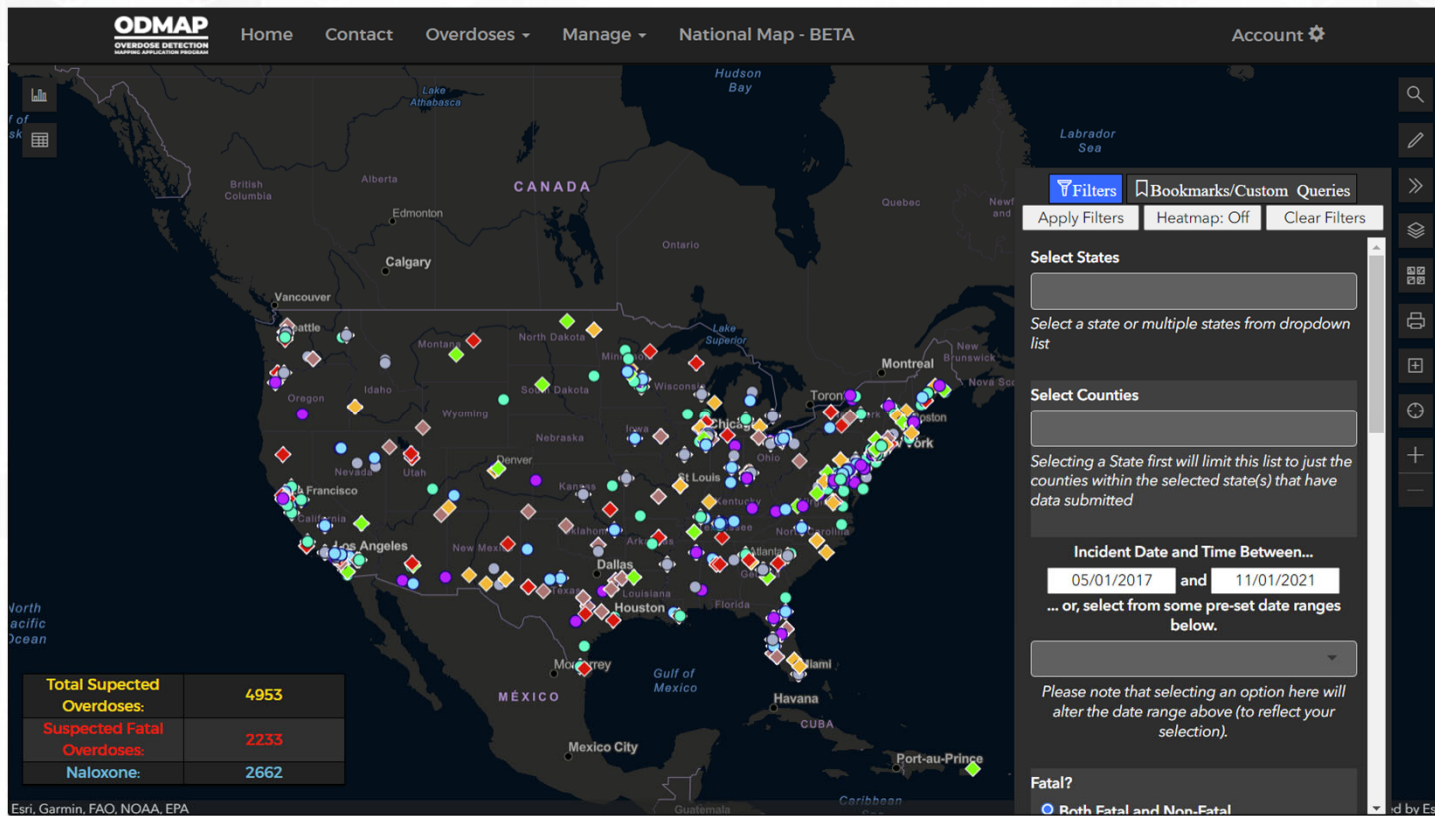
The National Map and Spike Alerts

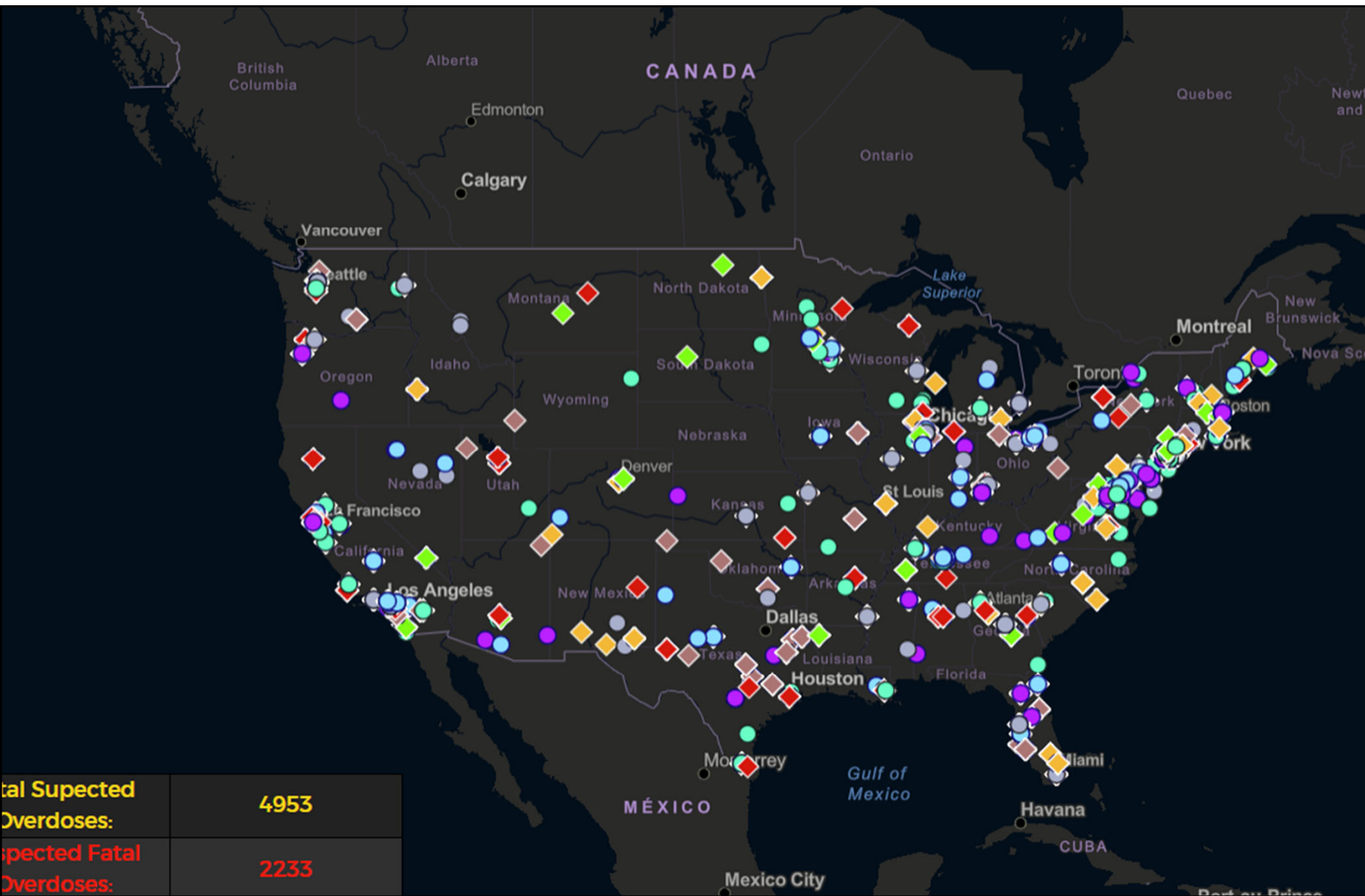


# ODMAP Features

- ODMAP National Map
  - Cross jurisdiction suspected event information
  - Filters
  - Heat maps
  - Charts
- Spike, Overdose, and Statewide Alerts
- Adding personal data and Esri web layers
- **Multiple agencies** providing data for areas, capturing more suspected events

# National Map and It's Features





Sea

**Filters**  **Home**

**Apply Filters**

**Select States**

Select a state or multiple states from the list

**Select Counties**

Selecting a State first will filter counties within the state for data submitted

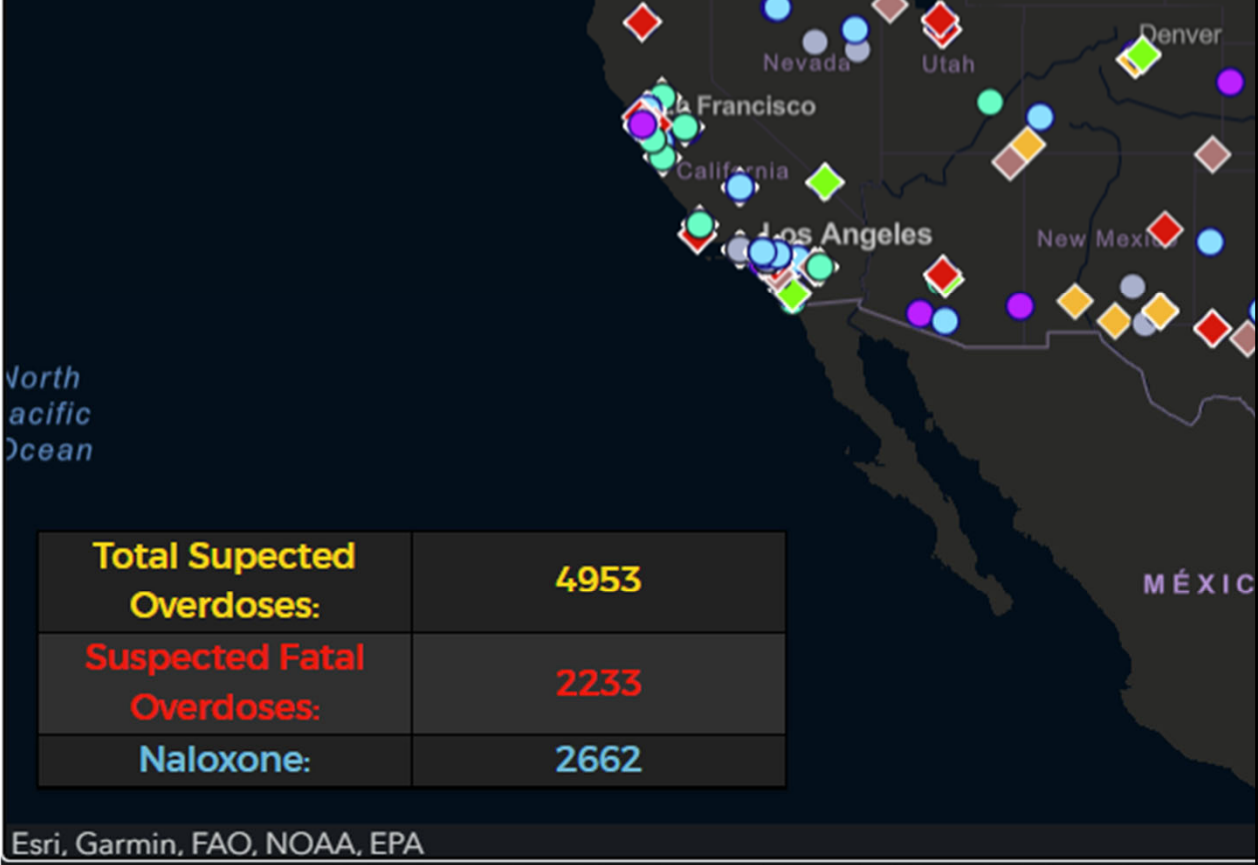
**Incident Date Range**

... or, select from a date range

Please note that selecting a date range will alter the date range of the data

<b>Total Suspected Overdoses:</b>	<b>4953</b>
<b>Suspected Fatal Overdoses:</b>	<b>2233</b>

# Default 24-hour Summary Statistics



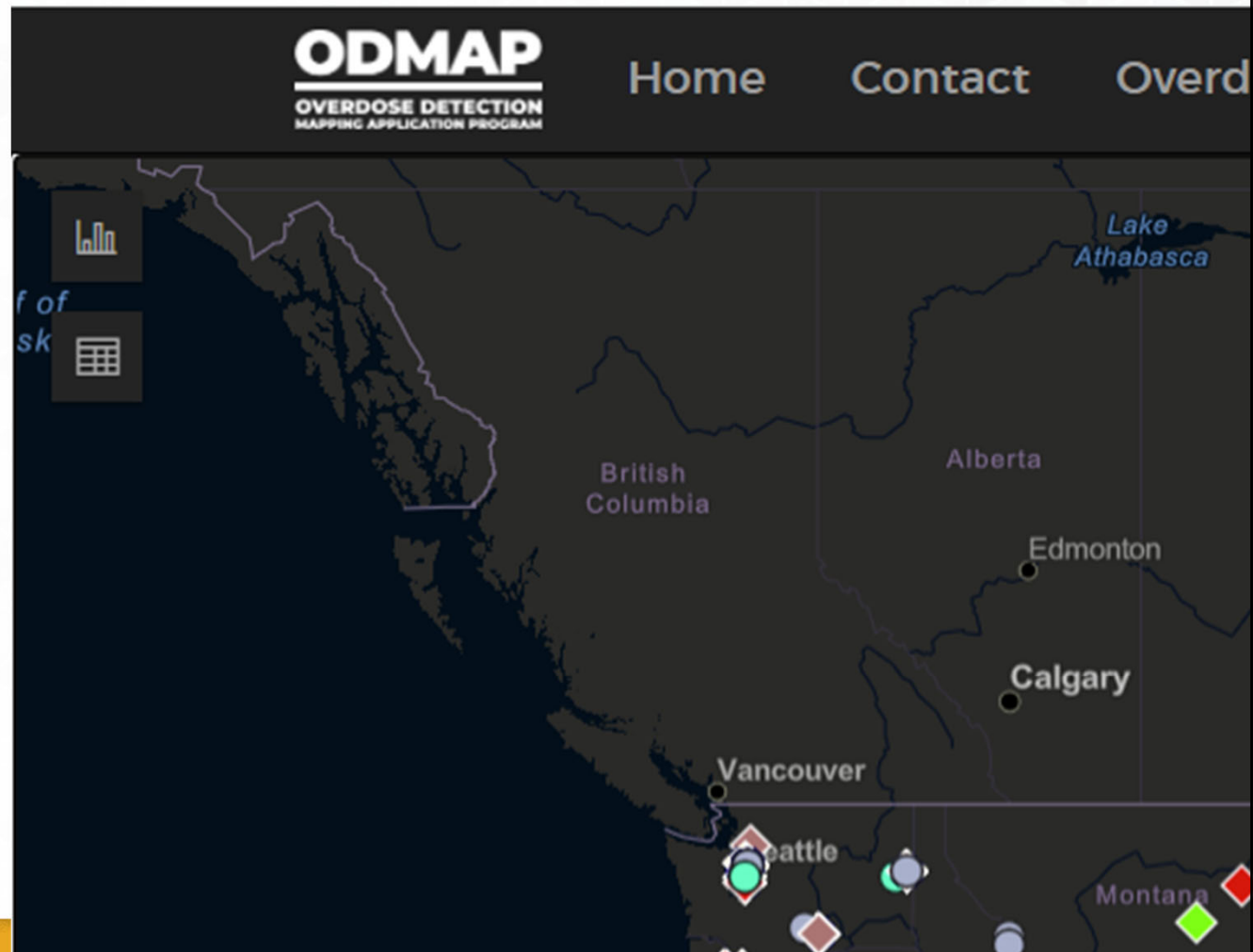
The screenshot shows the ODMAP web application interface. At the top, there is a navigation bar with "Labrador Sea" and "Newfoundland and Labrador" visible. Below this, there are two main tabs: "Filters" (highlighted in blue) and "Bookmarks/Custom Queries". Under the "Filters" tab, there are three buttons: "Apply Filters", "Heatmap: Off", and "Clear Filters". Below these buttons, there are two sections: "Select States" and "Select Counties". The "Select States" section has a dropdown menu and the text "Select a state or multiple states from dropdown list". The "Select Counties" section has a dropdown menu and the text "Selecting a State first will limit this list to just the counties within the selected state(s) that have data submitted". At the bottom, there is a section for "Incident Date and Time Between..." with two date input fields: "05/01/2017" and "11/01/2021", followed by the text "... or, select from some pre-set date ranges". On the right side of the interface, there is a vertical toolbar with various icons for editing, navigation, and map controls.

Built-in filters to do deep dives into ODMAP data, including:

- Dates
- Location
- Type of Drug

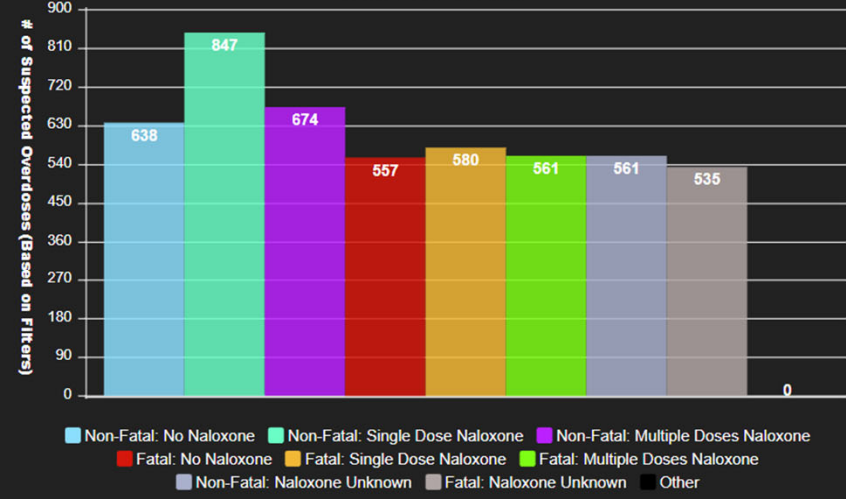
## Built-in charts, including:

- Outcome
- By Day/Month
- County/Line Comparison Chart



- Overdoses By Type
- Day of Week
- Hour of Day
- Suspected ODs Per Day
- Suspected ODs Per Month
- County/State Line Chart

**Overdoses by Type**



Total Suspected Overdoses:	4953
Suspected Fatal Overdoses:	2233
Naloxone:	2662

# Spike Alerts

## SPIKE ALERTS IN ODMAP

Early warning for proactive public safety preparedness



odmap@wb.hidta.org

Kehoet@chesterfield.gov;  laubachr@chesterfield.gov

Henrico, Virginia Spike Alert

Henrico, Virginia is in a spike. There have been 4 total overdose incidents in the last 24 hours.

Currently your spike alert threshold is 3 overdose incidents in 24 hours.

This spike alert was requested by the Chesterfield County Police Department.



# ODMAP in the Field

How do Agencies Use the Data in ODMAP to Drive Decisions

## ODMAP and OFRs

ODMAP can provide OFRs with near real-time surveillance of suspected overdose events to better understand the context of these deaths and to take immediate action to prevent future deaths

# Spike Alerts in the Field: Arlington County, VA

- On June 28, 2021, a spike alert was triggered for Arlington County, Virginia
- Public safety and health officials reached out to neighboring counties to identify scope of the spike
- Two other Northern Virginia counties reported higher than normal overdoses over the past weekend
- Arlington County stakeholders drafted a community alert and posted information on their coalition Facebook page, it included:
  - Information on the presence of Fentanyl
  - Local resources
  - Information on the local Safe Reporting of an Overdose Law



Arlington Addiction Recovery Initiative  
June 28 · 🌐

WARNING: There is a lethal batch of fentanyl in our region. There have been at least 15 deaths in the region (6 in Arlington alone) in the last two weeks due to this bad batch of Fentanyl

The fentanyl has been showing up in pressed pills (benzodiazepines and pain meds), marijuana and standalone fentanyl.

#### WHAT CAN YOU DO?

- Request free NARCAN through the mail at [narcan@arlingtonva.us](mailto:narcan@arlingtonva.us)
- Purchase naloxone/NARCAN from a pharmacy (no prescription required), most insurances cover it with a co-pay (Medicaid plans cover in full with no copay)
- Connect with [The Chris Atwood Foundation](#) (call or text: 703-653-4221) and request Fentanyl test strips to practice harm reduction
- Practice harm reduction: Go slow, try a small amount first, never use alone, always have narcan nearby, and use the Never Use Alone Hotline (<https://neverusealone.com>)
- In the event of an overdose, call for help. The Safe Reporting of Overdose Law is in place to offer protection from prosecution: no individual is subject to arrest or prosecution for any substance related crimes (other substances, paraphernalia, public intoxication, under age drinking) if they call for help for someone who is overdosing or they themselves are overdosing

**ODMAP**  
OVERDOSE DETECTION  
MAPPING APPLICATION PROGRAM

# Spike Alert Response Teams/Protocols

- Agencies create a tailored spike response program to ensure there is a quick response to increases or spikes in overdoses
- Should include public health, law enforcement, EMS, hospitals, and adjacent agencies (i.e. medical examiners/coroners and hospitals)
- Can set up spikes for any threshold on ODMAP, so agencies can be alerted based on their agency's prevention/response program

# Outreach Teams

- Agencies can use ODMAP to identify cases in their specified jurisdiction
- Once an overdose is identified, they will connect with the reporting agency and implement their follow-up protocol
- Specific case information comes from the agency itself, not ODMAP



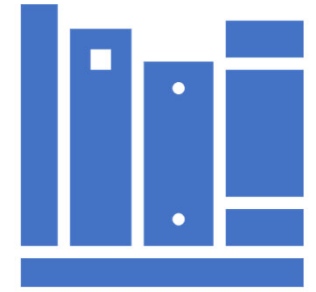
# How You Can Get Started with ODMAP

- If you are part of an eligible agency, you can request agency access to ODMAP at [odmap.org](http://odmap.org) and complete the form
- Once approved, you can login and begin using ODMAP and all its features, like the National Map
- If you are part of an ODMAP agency, you can work with your admin to be added as a user using their agency code



# Questions?

Thank you for attending the ODMAP presentation



Ocean County Overdose Fatality Review

# OFR and ODMAP: A Full Circle Recommendation





1

## Ocean County Overdose Fatality Review Program

January 2018: After a year of planning, Ocean County, NJ launched its overdose fatality review process with over 30 affiliated partners

- 174 decedent cases reviewed to date
- Sub-Committees: Executive, Stigma Reduction, Chief's Opioid Response Committee, Recommendation Ad-Hoc

2



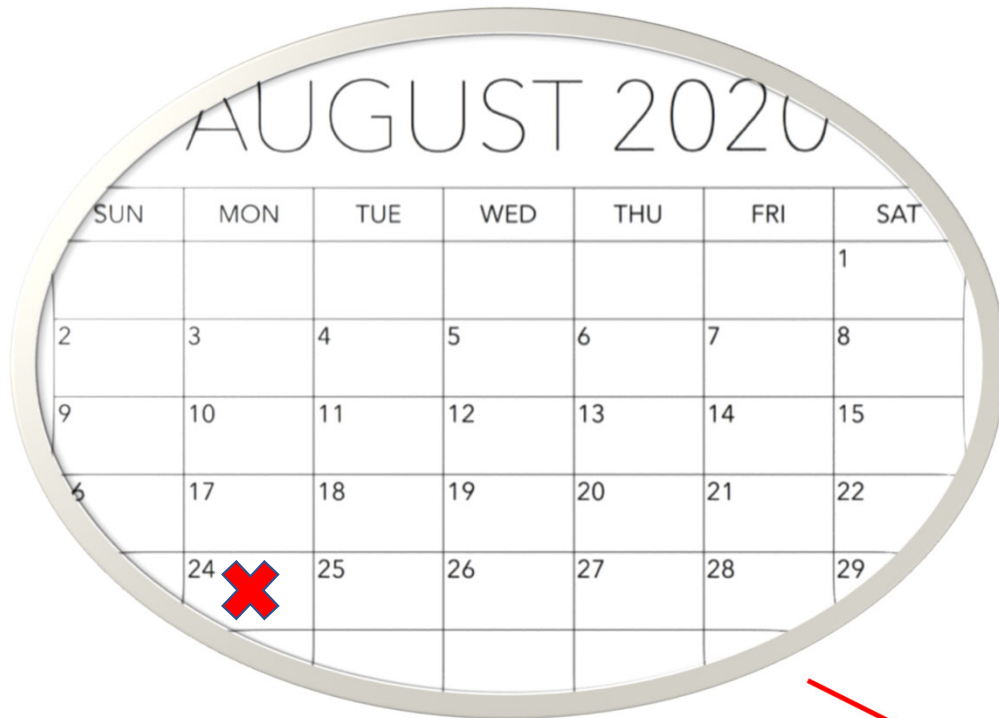
October 2018: New Jersey instituted an ODMAP pilot program

- All law enforcement agencies started using ODMAP by the end of 2019
- April 2021, integrated EMT and paramedic naloxone data into ODMAP

Enables the development of vital intelligence that supports

- County-based spike alerts
- Imminent Warning Report
- At-Risk Matrix

3



August 24, 2020 “At the time of this decedent’s death, Ocean County was in an overdose spike” – NJSP Captain Piotrowski



Tell Us More!



4

Fall 2020

OFR Executive—Is there value in this idea/recommendation?

Partnered with New York/New Jersey HIDTA to explore ODMAP utilization in other jurisdictions

“Success is best when it's shared.”

Howard Schultz

“I'm not the smartest fellow in the world, but I sure can pick smart colleagues.”

—FRANKLIN D. ROOSEVELT

RD



“When we put our heads together, when we trade, borrow, and acquire ideas from each other, we all win.”

—KEN BLANCHARD, CO-FOUNDER  
OF THE CENTER FOR LEADERSHIP DEVELOPMENT

ASCD

None of us is as smart as all of us.

Ken Blanchard



## ONEIDA COUNTY, NY

- Drug Threat Analysis Worksheet

## OHIO DEPARTMENT OF HEALTH

- Community Response Plan Template
- OHIO Against OD Campaign



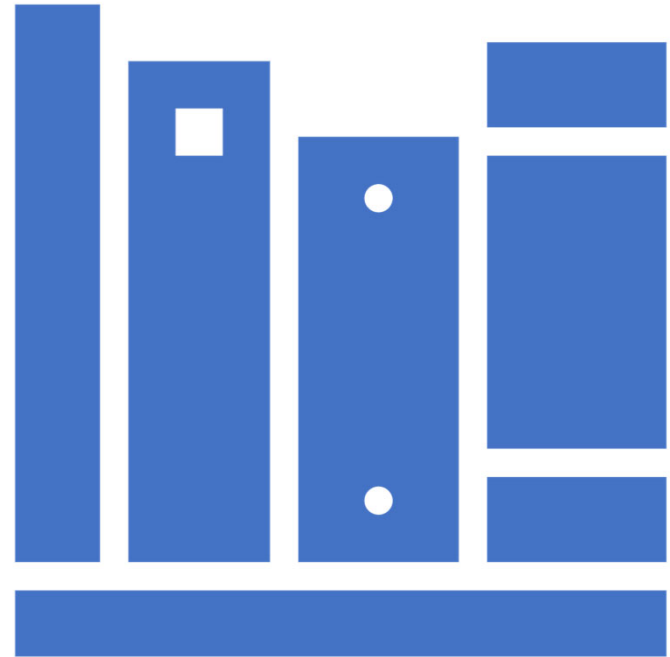
# Recommendation Finalized: Now What?

- ODMAP education from NJSP
- OFR and OFR Executive support further review
- Informational Journey with NY/NJ HIDTA
- Full recommendation finalized and endorsed



## Next Step of Processing Questions

- Who is the best agency to house this project?
- Do we need funding?
- How can we sustain project?



# Answers

Who is the best agency to house this project?

- Ocean County Health Department
- Aligned with our mission/vision
- Department of Substance Abuse, Addiction, and Opioid Dependency

Do we need funding?

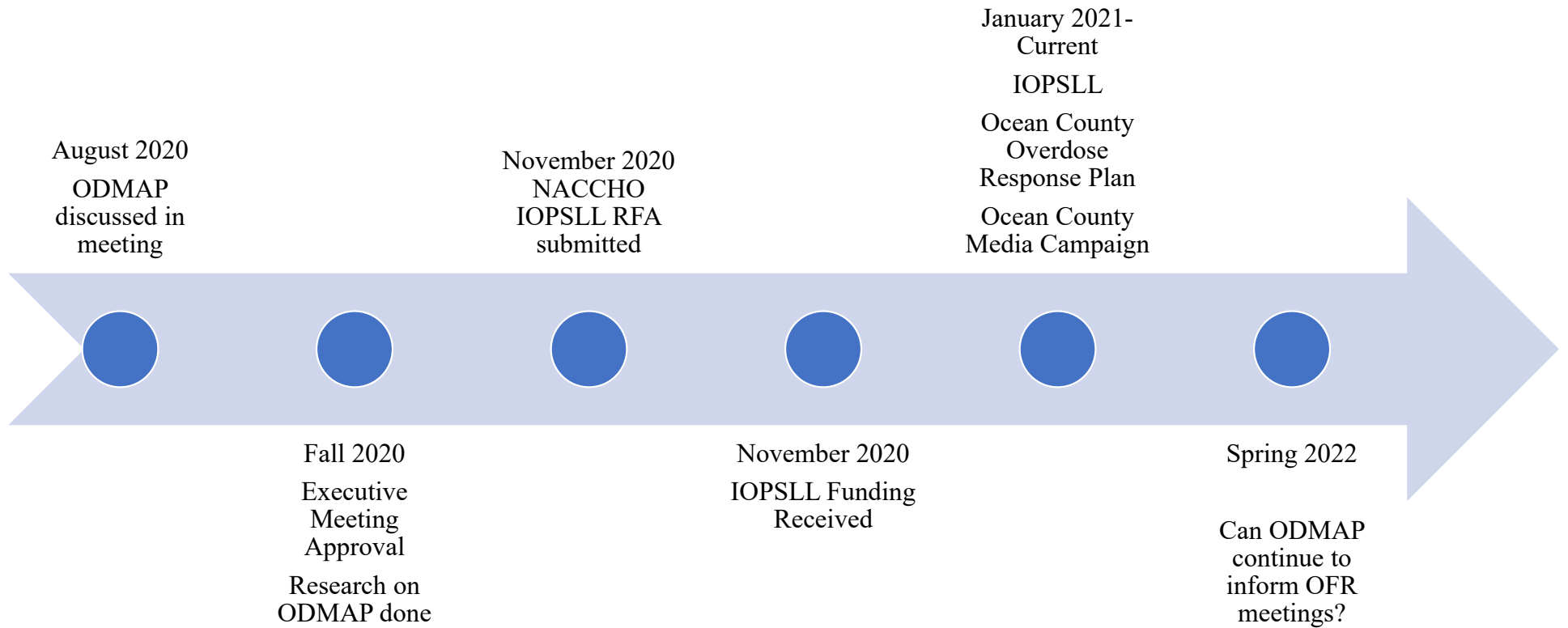
- Sure do!
- NACCHO Implementing Overdose Prevention Strategies at the Local Level (IOPSLL)—RFA due November 6, 2020

How can we sustain project?

- If we can get funding to build the foundation, we can sustain operations after



# Recommendation Timeline Review



# Ocean County IOPSSL

**Ocean County Overdose Response Plan**

**2021-2022**

*A community driven response plan to address overdose spikes in Ocean County, developed and implemented in partnership.*

**Ocean County Health Department**  
Sponsored · 🌐

245 Ocean County Lives Lost to Overdose in 2020.

[HTTPS://WWW.OCHD.ORG/](https://www.ochd.org/)  
**Get The Help You Need!**  
4 Lives Everyday...

LEARN MORE

Share

Report between 2/7/2022 and 2/27/2022 **PURPLEgator**

**General Awareness #2 (2426)**

FACEBOOK & INSTAGRAM							
Impressions	Clicks (All)	CTR (All)	Reach	Post Reactions	Post Saves	Post Shares	Post Comments
180,228	2,879	1.65%	52,455	275	5	82	50

YOUTUBE				
Impressions	Video Views	View Rate	Clicks	CTR
86,449	44,508	51.48%	97	0.11%

GOOGLE DISPLAY		
Impressions	Clicks	CTR
470,261	1,983	0.42%

**Narcos Awareness #2 (2427)**

FACEBOOK & INSTAGRAM							
Impressions	Clicks (All)	CTR (All)	Reach	Post Reactions	Post Saves	Post Shares	Post Comments
197,526	3,181	2.02%	53,573	155	8	38	73

YOUTUBE				
Impressions	Video Views	View Rate	Clicks	CTR
84,925	42,921	49.95%	90	0.11%

GOOGLE DISPLAY		
Impressions	Clicks	CTR
510,742	1,923	0.38%

**Ocean County Health Department**  
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In 2021, Ocean County averaged five overdoses a day...not all survived....get the help you need

[HTTPS://WWW.OCHD.ORG/](https://www.ochd.org/)  
**Help is Available**  
4 Lives Everyday...

LEARN MORE

Share

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**Instagram**

**Ocean County Health Department**  
Sponsored

Learn more >

Most Overdoses Happen At Home... Are You Prepared?...Get Free Narcan.

# Full Circle Recommendation: Bringing ODMAP into the OFR

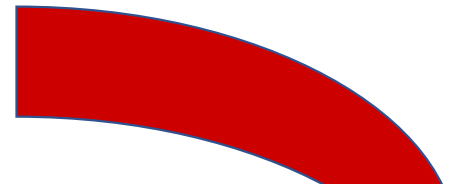
## Case 1 ODMAP

2/19/2021: 4 non-fatal overdose cases

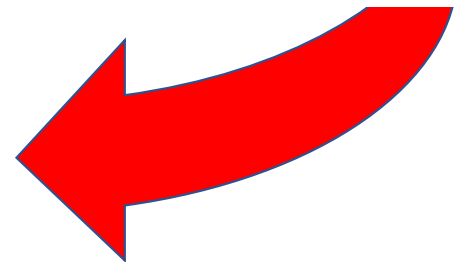
- 2 single dose naloxone, both Toms River
- 2 multi-dose naloxone, 1 Brick, 1 Toms River

2/20/2021: 3 overdose cases, 1 fatal

- 1 non-fatal no naloxone: Lacey
- 1 non-fatal single dose naloxone: Point Pleasant Borough
- 1 fatal no naloxone: Toms River



*Day prior to Case #1 overdose death, there were 3 overdoses in the same municipality?*





# ODMAP and Law Enforcement: Additional Initiatives at NJSP

## At Risk Matrix Delivery (ARMD)

- Identifies at-risk individuals through analysis of naloxone administrations and arrest data.

## Imminent Warning Report (IWR)

- Identify individuals who have an increased risk of overdose based on multiple recent naloxone administrations.

## Spike Alert Response Plan (SARP)

- Notification of local partners in the event of an overdose spike.

## Hot Spot Area Outreach (HSAO)

- Determination of Geographic "hot spot" analysis for high volume overdose areas of increased reported overdose incidents and traffic areas.

Data  
To  
Prevention

# At Risk Matrix Delivery (ARMD)

The DMI's At Risk Matrix Delivery (ARMD) is a report of identified individuals who previously overdosed. This tool helps identify those who most likely are in need of services and support.



Report information is provided via an analysis of correlated data sets including naloxone administration reports.

- ✓ The ARMD has been disseminated to all 21 NJ counties in support of local outreach as well as the Office of the Attorney General's Operation Helping Hand (OHH).

## Imminent Warning Report (IWR)

Identify individuals who have an increased risk of overdose based on multiple recent naloxone administrations

IWR: December 15, 2021

- Camden County
- 36 year old Female with identifiable information
- Individual received three Naloxone administrations within three days

### Immediate Response:

- In collaboration with local police department RISE connected with individual at home residence.
- Spoke with individual and family member
- Appointment with psychiatrist arranged for next day at 1:00 p.m.
- Additional support services provided for individual and family

### Imminent Warning Report (IWR)

Identify individuals who have an increased rate of overdose incidents at an increased frequency (i.e., hours, days, weeks) for immediate follow-up

IWR: December 15, 2021

- Camden County
- 36 year old Female with identifiable information
- Individual received 3 Naloxone administrations within 3 days

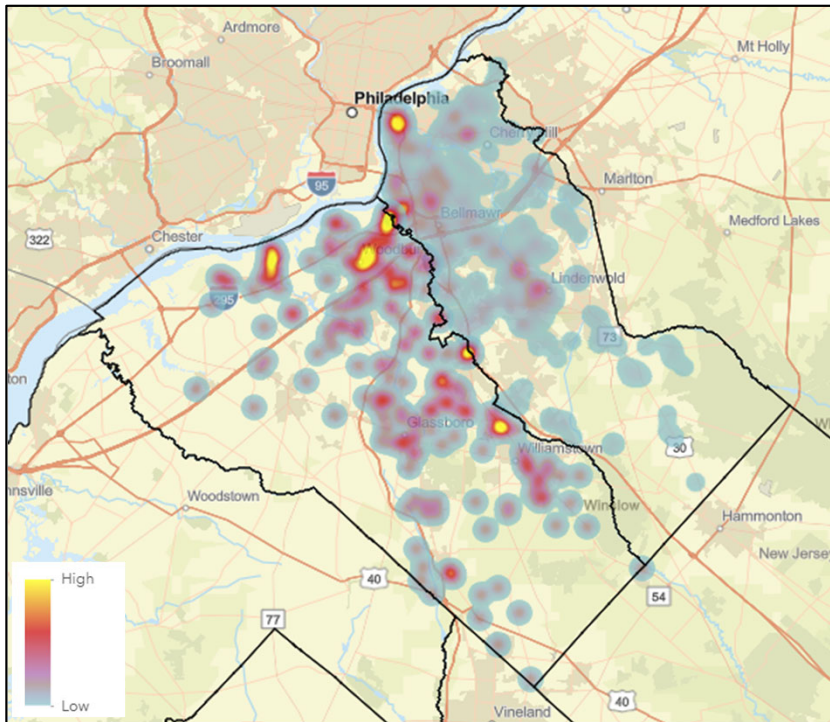
#### Immediate Response:

- In collaboration with local Police department RISE connected with individual at home residence.
- Spoke with individual and family member
- Appointment with psychiatrist arranged for next day at 1pm
- Additional support services provided for individual and family

**This interaction is a testament in many ways, how?**

- Law Enforcement making a difference; Local PD presence, went out to extend courtesy to an individual and connected to a family.
- Family felt taken back and very thankful; stated “I can’t believe you came out here to help us, thank you so much!”
- The individual is confirmed to receiving assistance and has resources and additional support.
- Family in community has connected; understanding our intent has broken intimidating stigma towards law enforcement and the self infliction of Substance Use Disorder.
- Importance of DMI functional capacity; DMI Imminent Warning System (IWS) initiated a positive outcome of proactive interaction.

# Incident Response

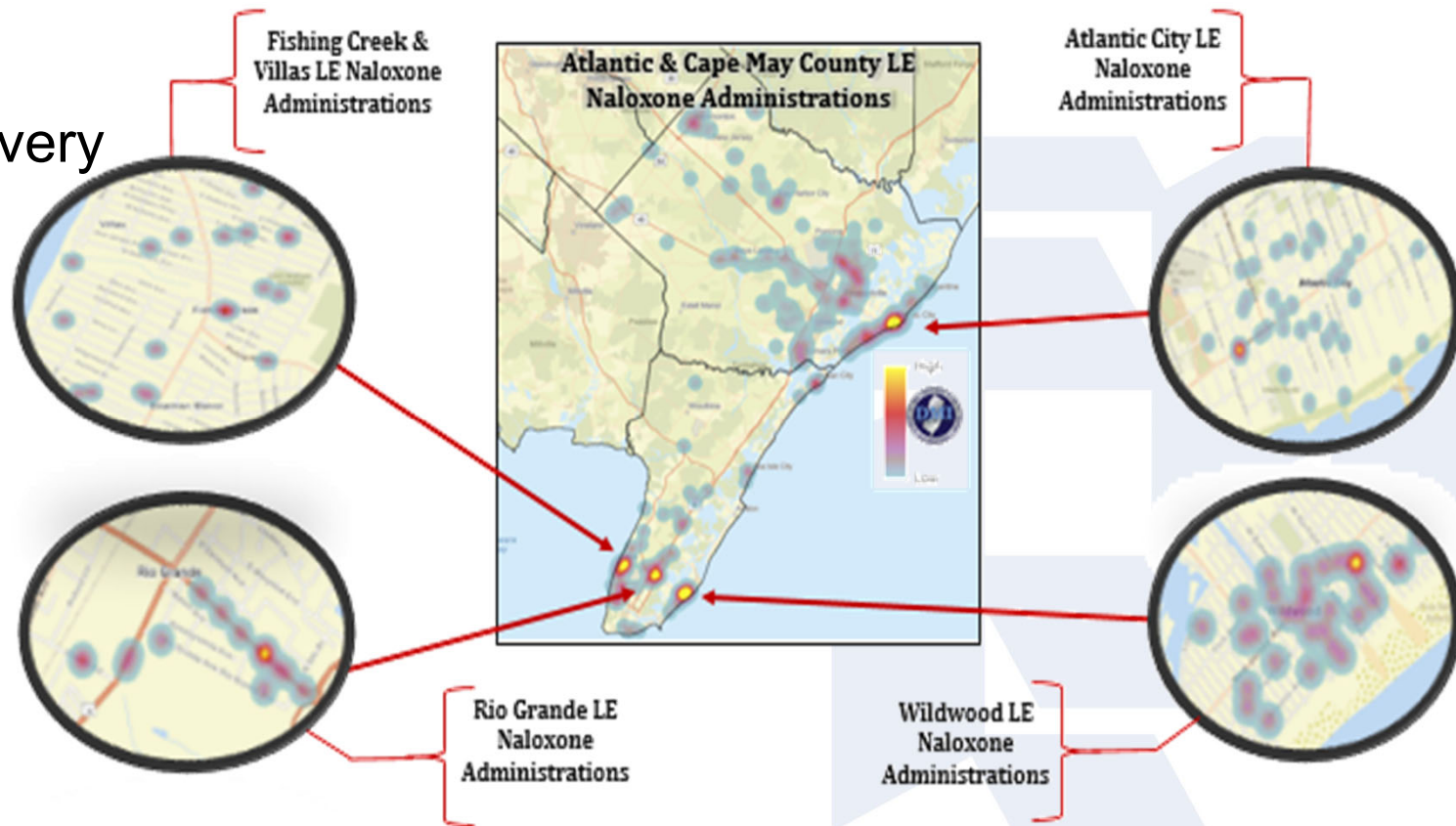


Camden & Gloucester County LE Naloxone Administrations

- Spike Alert Response Plan (SARP)—continued elevated rise in spike should occur RISE initiate's an immediate recovery support response

# Critical Data-Driven Response

- At Risk Matrix Delivery (ARMD)
- Imminent Warning Report (IWR)
- Hot Spot Area Outreach (HSAO)



# Training and Technical Assistance

BJA's **Comprehensive** Opioid, Stimulant, and Substance Abuse Program

COSSAP GRANT PROGRAM    LEARNING OPPORTUNITIES    AREAS OF FOCUS    TOOLS & FRAMEWORKS    PUBLICATIONS & DIGITAL MEDIA

**EXPLORE MODULES**

- Recruit Your OFR Members
- Plan Your Meetings
- Facilitate Your Meeting
- Collect Your Data
- Build A Recommendation Plan

**OFR**  
Overdose Fatality Review

Overdose Fatality Reviews (OFRs) effectively identify system gaps and innovative community-specific overdose prevention and intervention strategies.

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Tools & Frameworks    **OFR**

## TRAINING AND TECHNICAL ASSISTANCE REQUEST

The fields marked with the \* are required.

Name \*

Agency \*

Current Grant Funding Source

Title \*

City \*

State/Territory \*

Email \*

Phone Number \*

JTA Type \*

# Questions?