
Oregon EMS & Trauma Systems

Using Data to Support Overdose Response & Prevention

Monday, June 17, 2024



PUBLIC HEALTH DIVISION
EMS and Trauma Systems

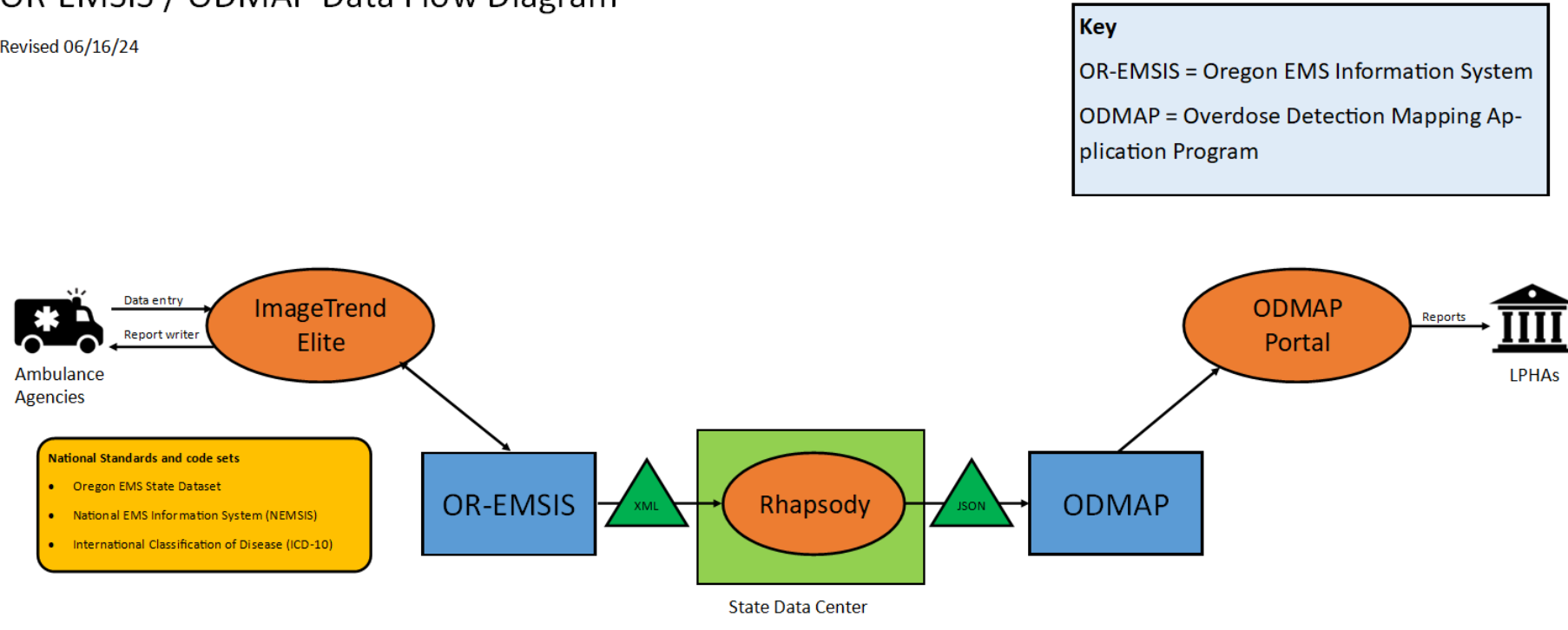
OR-EMISIS / ODMAP Integration

- The ODMAP Integration will utilize a VPN tunnel to securely send ePCR data to the Rhapsody integration engine in the state data center.
- When Rhapsody receives a record from OR-EMISIS it will be:
 - filtered to identify OD related events,
 - geocoded, and
 - transformed to create the ODMAP file
- Data is then posted to the ODMAP API which will ingest it into their database where it can be accessed by authorized personnel through a web portal

OR-EMESIS / ODMAP Integration

OR-EMESIS / ODMAP Data Flow Diagram

Revised 06/16/24



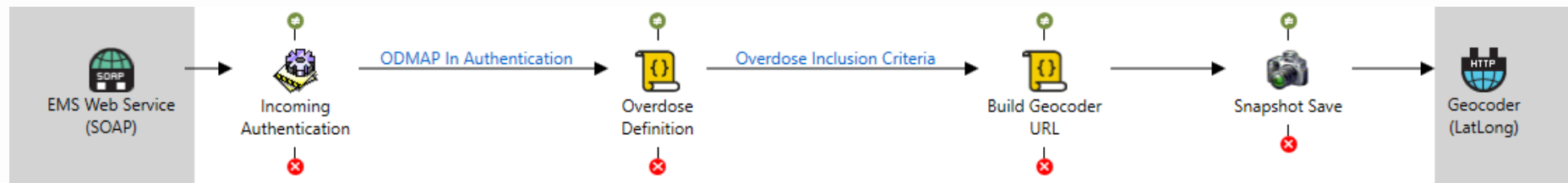
Rhapsody Integration Engine

- The Rhapsody Integration Engine is a trusted application for configuring, maintaining and monitoring performance of data integrations.
- Supports a wide range of communication protocols, data types, and transformations.
- Widely used in healthcare settings with sensitive data.
- Securely hosted in the state data center.

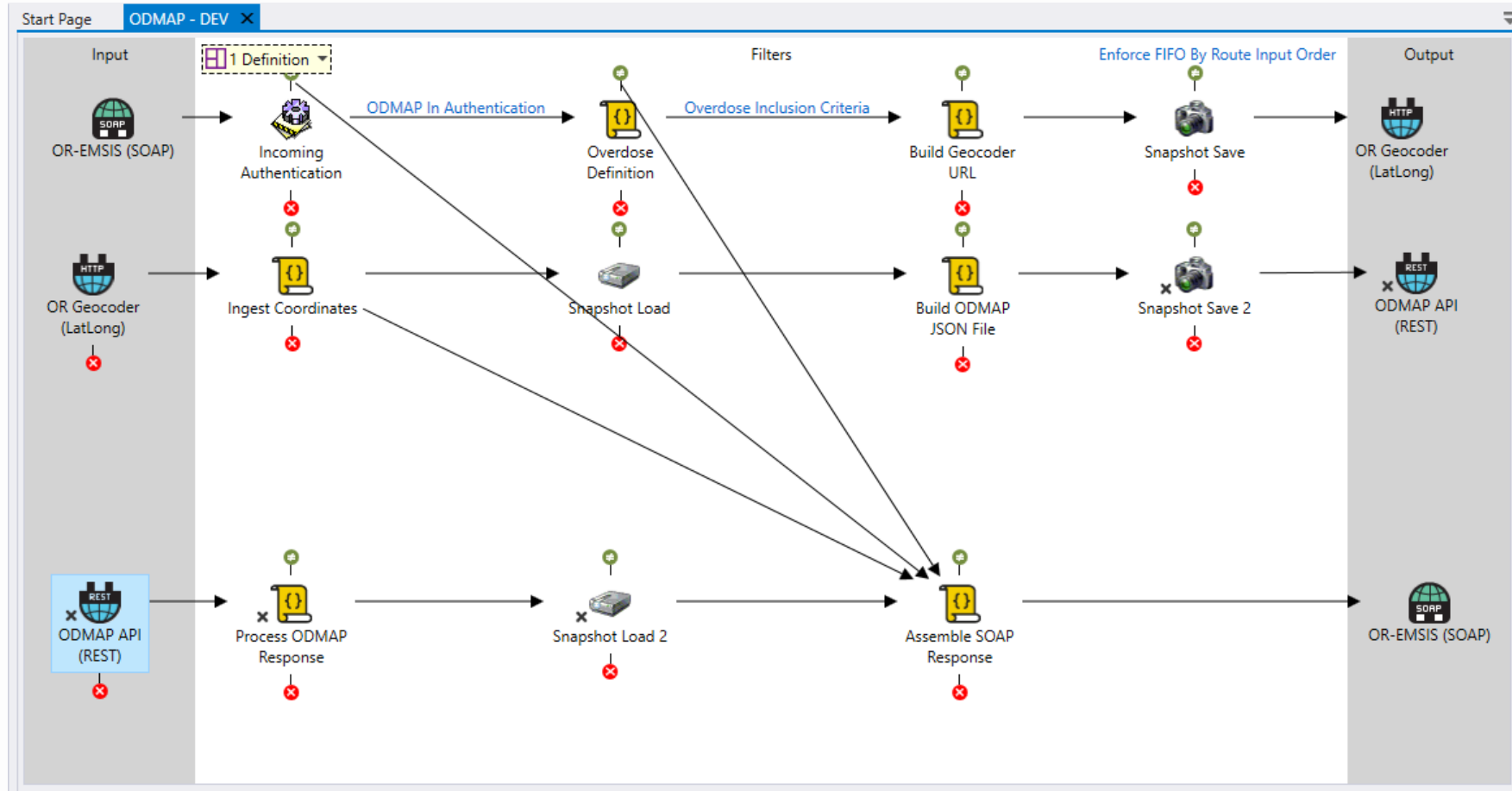
R H A P S O D Y

Rhapsody Integration Engine

- Rhapsody provides you with a palette on which you construct a “route.”
- Think of this a pipeline from the source to the destination.
- Made up of communication points on either end.
- In between there are “filters” that perform operations on the “message”
- Connected by arrows that indicate information flow
- Conditional filters are implemented as arrows shown here with words above them



Rhapsody Integration Engine



Overdose Definition

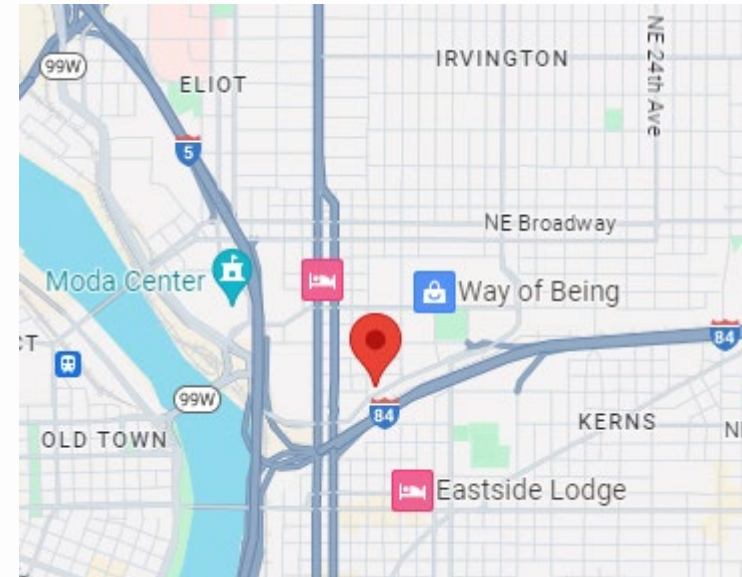
The overdose definition draws on a number of fields in the ePCR to identify EMS calls related to an overdose:

- Provider impressions and symptoms
- Complaint
- Medication administered and medication response
- Narrative

Outputs an indicator of an overdose related record and then filters before passing on through the route.

Geocoding

- We need to take address elements from the ePCR and turn them into coordinates to plot on a map.
- The Oregon Address Geocode Locator is an API (Application Programming Interface) that provides this service
 - You send a query in the form of a web address
 - It returns a JSON message with the coordinates of that address



Geocoding

- We have to be careful to avoid disclosing information that individually identifies a patient
- To protect patient confidentiality, we round the coordinates
- A population density lookup table is housed in Rhapsody
- Zip code level population density is used to tune how many decimal places to round to
- The resulting map location indicates an area populated by no less than k individuals on average
- For very low population density zip codes we use the center point of the zip code tabulation area

ODMAP API

- Once we have the rounded coordinates we can assemble the outgoing JSON message
- This requires transformation of many different fields from the ePCR
- Message will contain:
 - Incident Type
 - Lat & Long
 - Incident Date Time & Time Zone
 - Is Multiple Victim
 - Taken to Hospital
 - Naloxone Administered by

ODMAP Integration

Project Status

- Route components have been built
- Working with OIS to establish connectivity from OR-EMSIS into Rhapsody through VPN tunnel
- Troubleshooting connectivity with the ODMAP API
- Next steps:
 - Testing
 - Migration to production

Questions?

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ODMAP and the Overdose Response Strategy

Isabelle Cisco, Oregon
Joe DelGreco, Oregon



ODMAP
OVERDOSE DETECTION
MAPPING APPLICATION PROGRAM



COLLABORATE • SHARE • INFORM & HELP

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Federal Acknowledgement

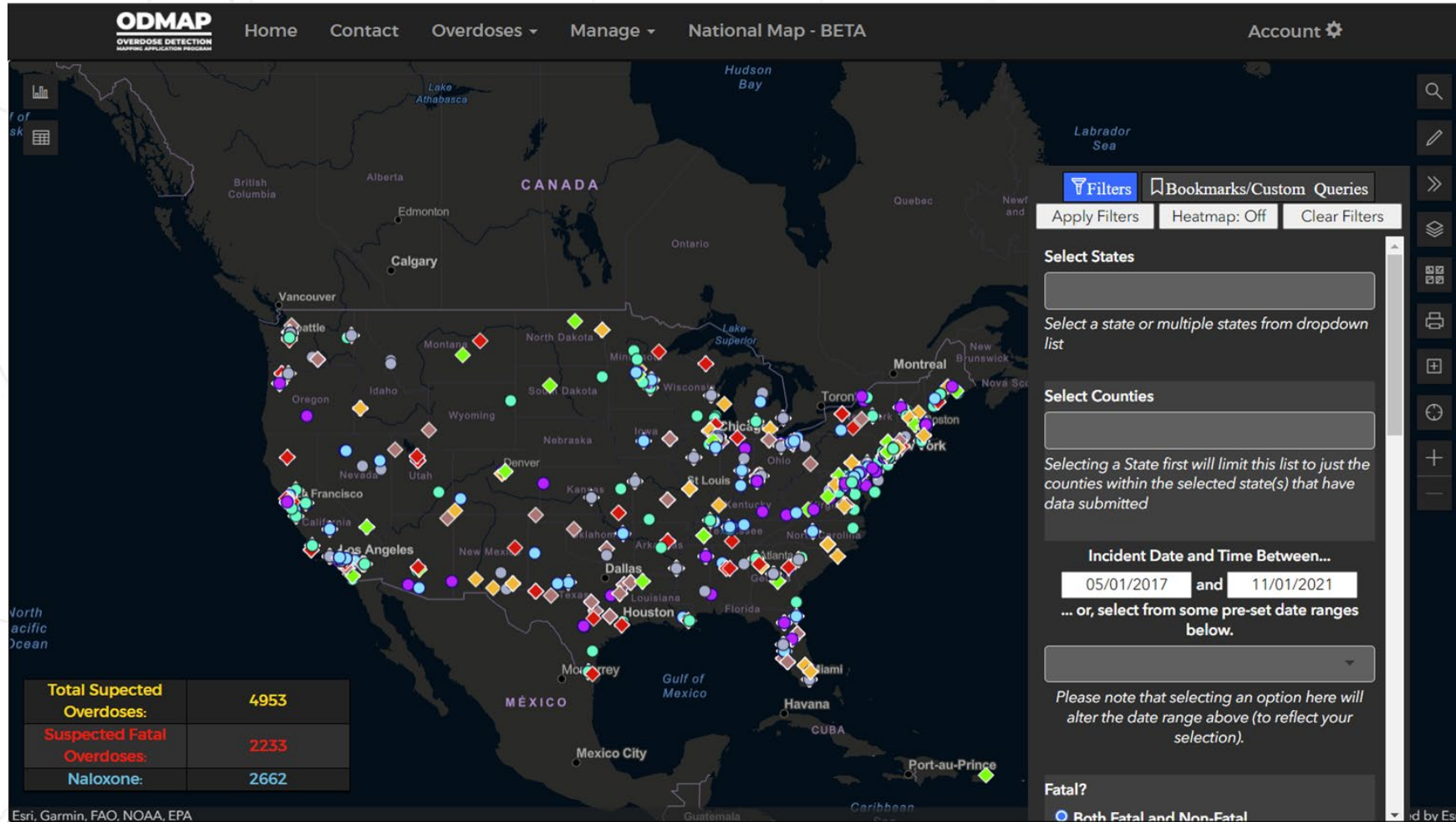
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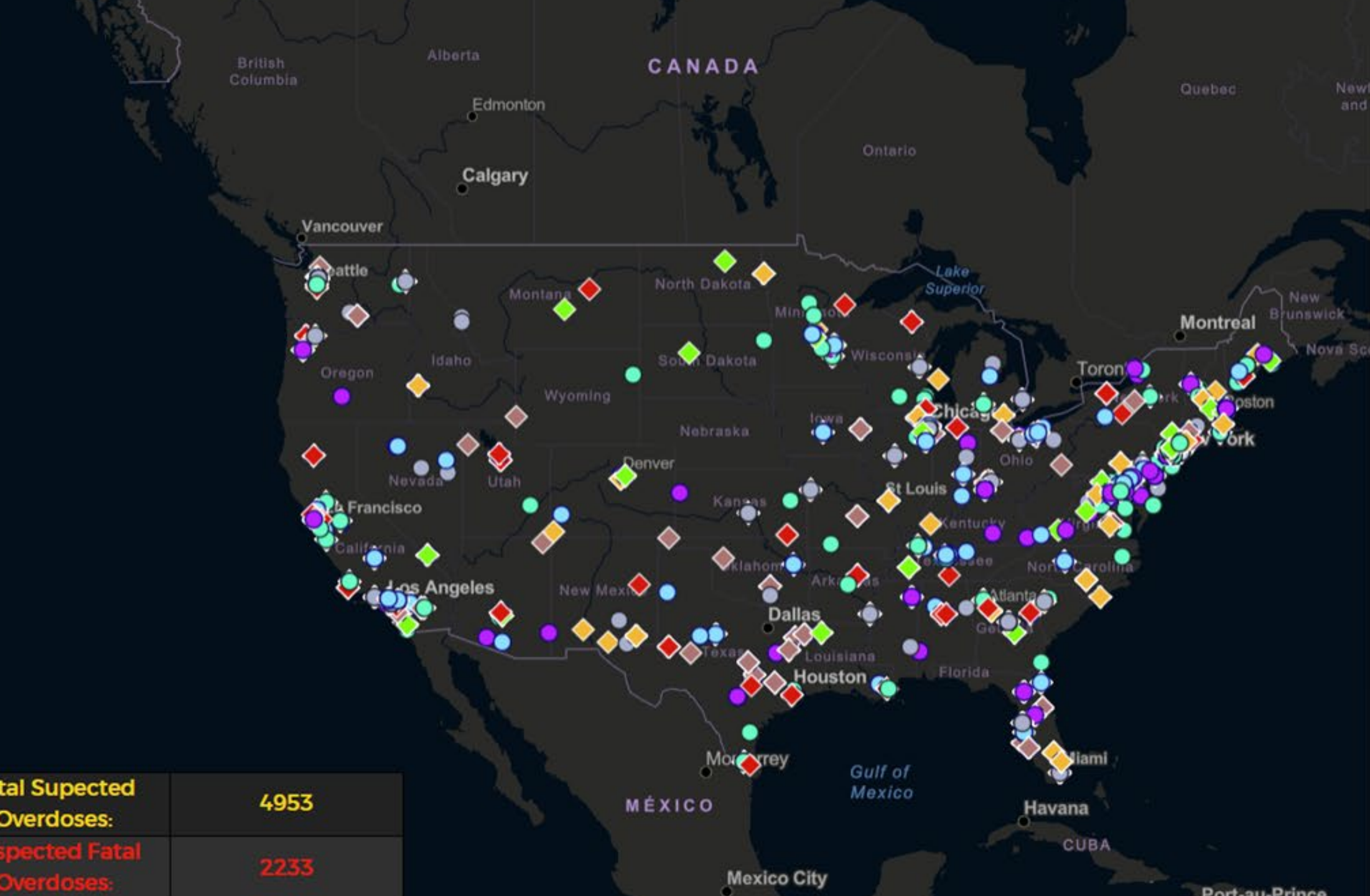


ODMAP Tools

The National Map and Spike Alerts

National Map and Its Features





Filters

Bo

Apply Filters

H

Select States

Select a state or multiple states from the list

Select Counties

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

Incident Date

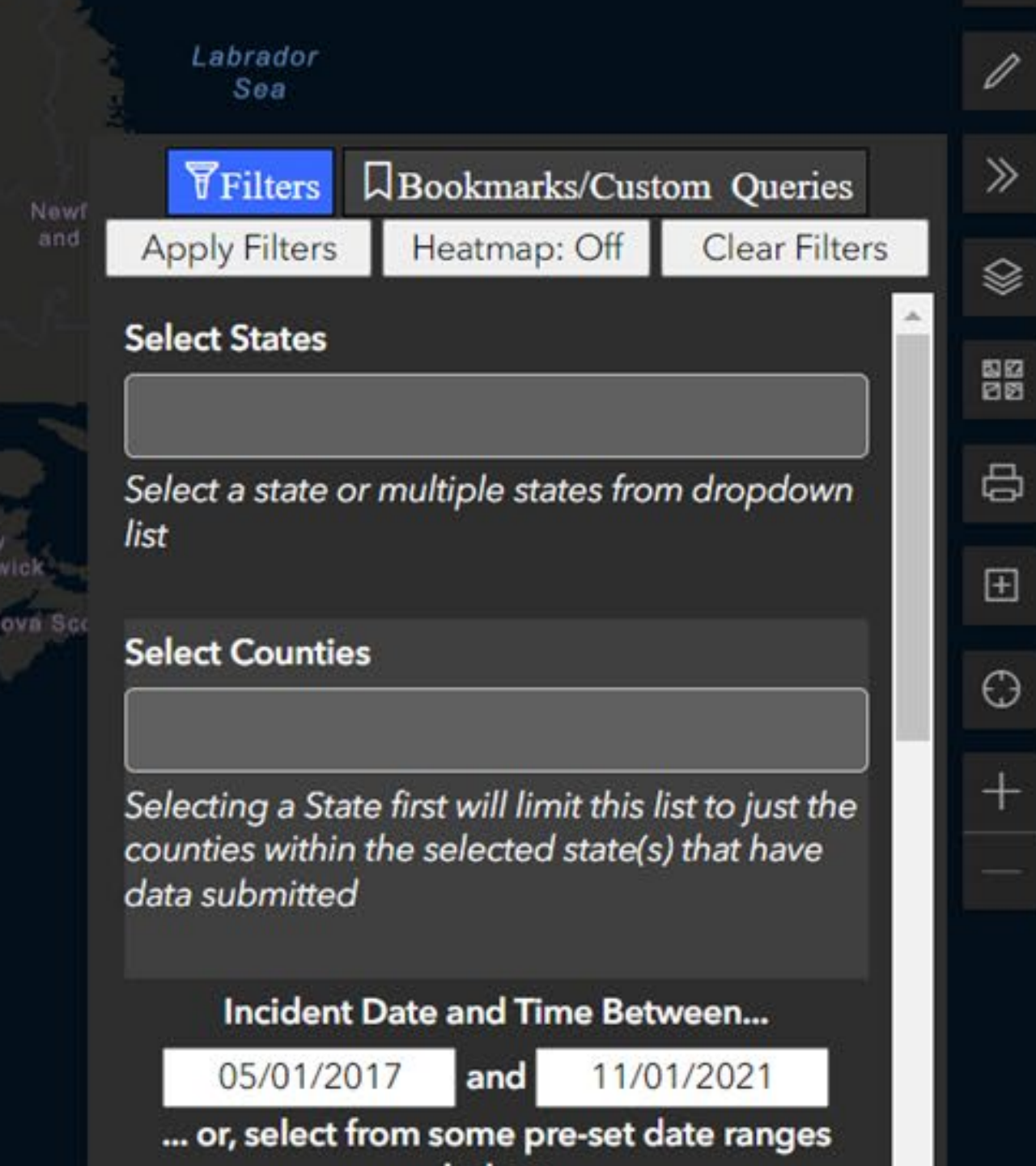
... or, select from a date range

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

Suspected Fatal Overdoses:	4953
Suspected Fatal Overdoses:	2233

Default 24-hour Summary Statistics



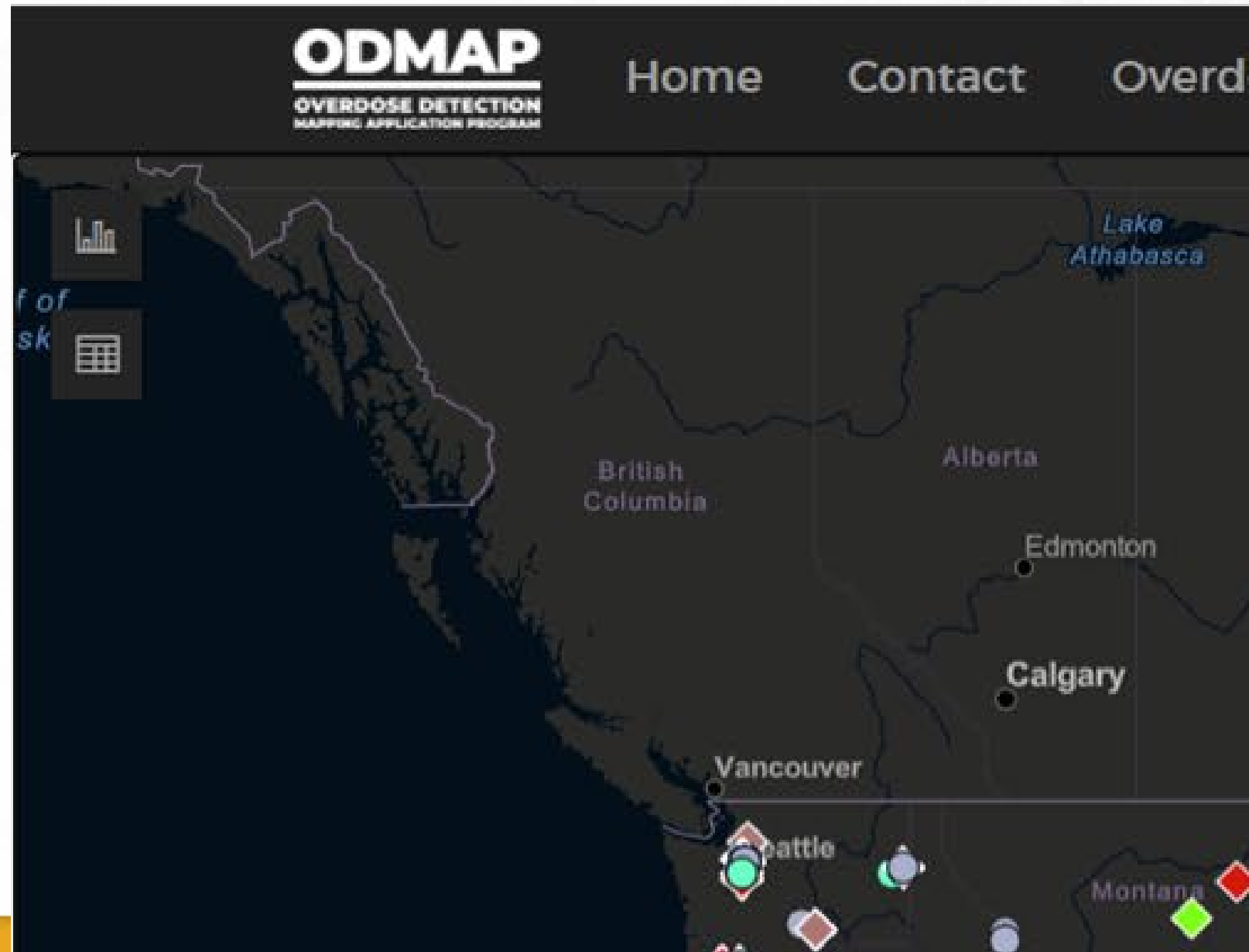


Built-in filters to do deep dives into ODMAP data, including:

- Dates
- Location
- Type of drug

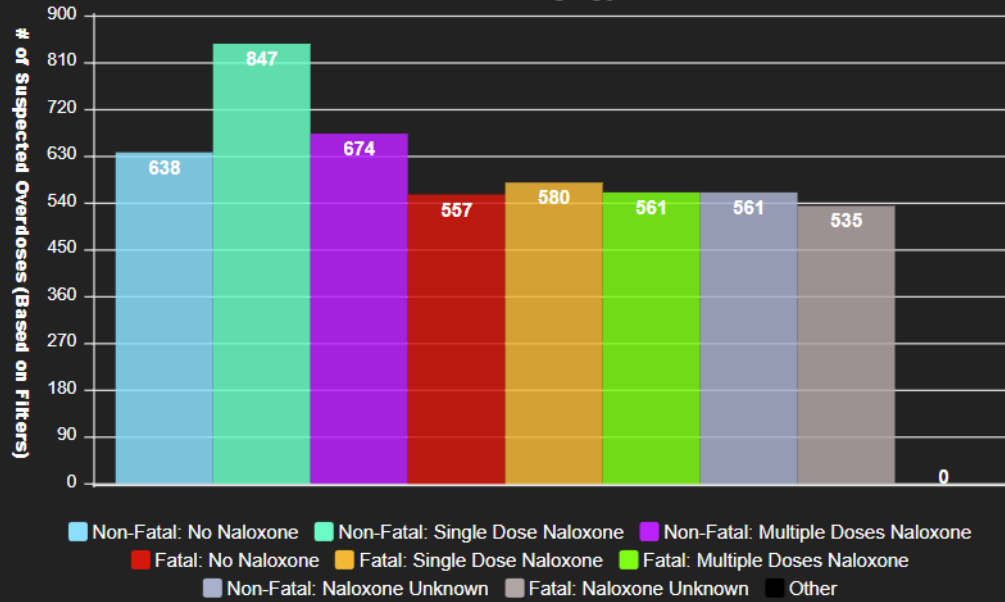
Built-in charts, including:

- 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



North Pacific Ocean

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

MÉXICO

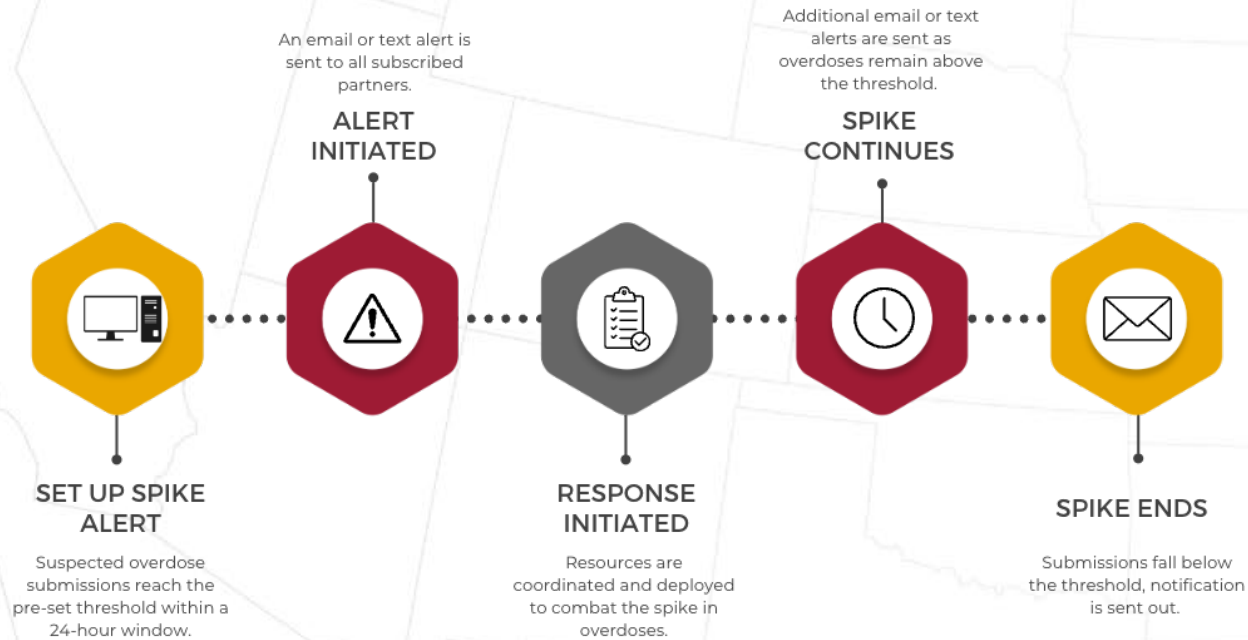
Gulf of Mexico

CUBA

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

Spike Alerts



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 Demo

Questions?

Thank you for attending the ODMAP presentation

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