DC | HEALTH

Opioid Overdose Surveillance in the District of Columbia
June 2023

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GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

OVERDOSE SURVEILLANCE

- 3 pronged strategy – fatal overdose surveillance – medical examiner, death certificate, toxicology

- Non-fatal overdose surveillance – ESSENCE, FEMS

- Dissemination

- Multi-agency work group sharing information

- Accurate picture of the typical opioid user in the District of Columbia/ Respond to and Prevent Overdose Clusters

OPIOID OVERDOSE IN DC: SCOPE OF THE ISSUE

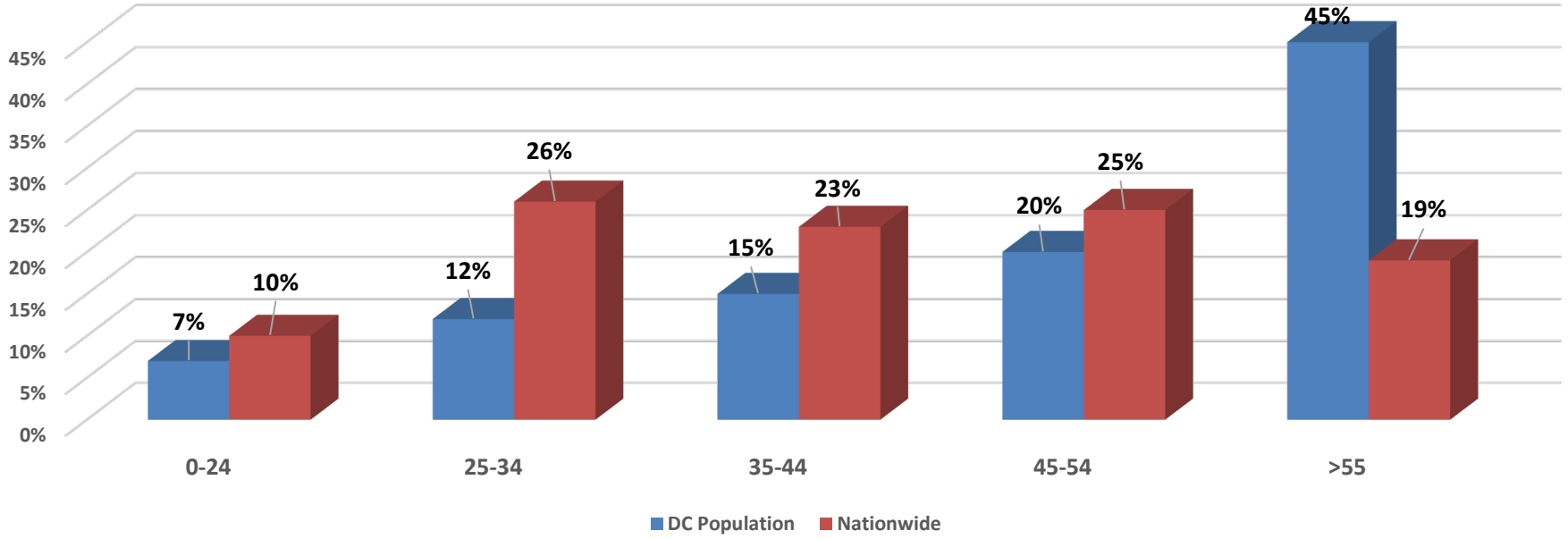
- **DC Fire & EMS Narcan administration/ Deaths:**
- **2014: 1,520 /83**

- **2022: 3,604/ 458**
- **Naloxone administrations have more than doubled.**
- **Deaths up over 400% in same period. Opioids now account for ~80% of drug poisoning deaths.**

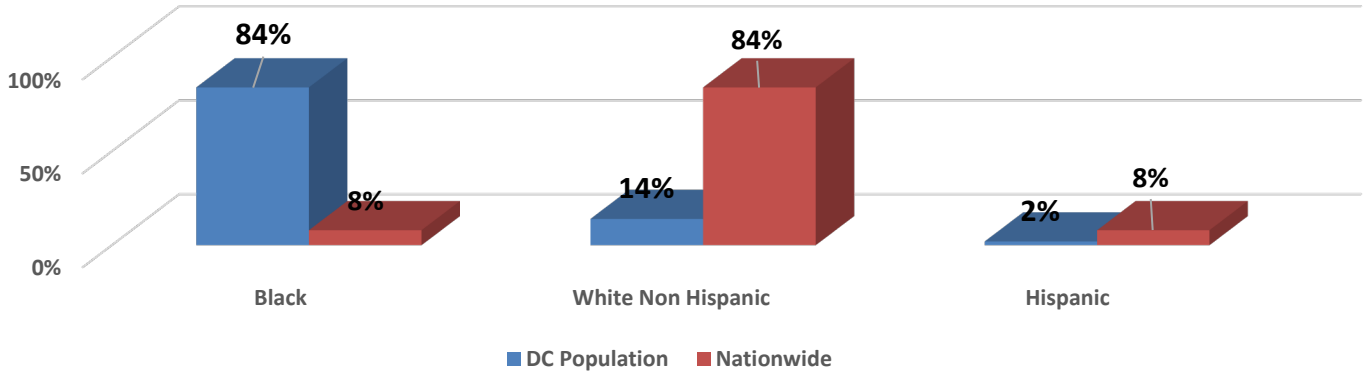
DC VS REST OF AMERICA

- Very different core group of users
- Average Opioid addict is older (mean age 52 years), less racially diverse (85% African-American)
- Long history of use
- Concentrated in smaller enclaves within the city (Wards 5, 7 and 8)

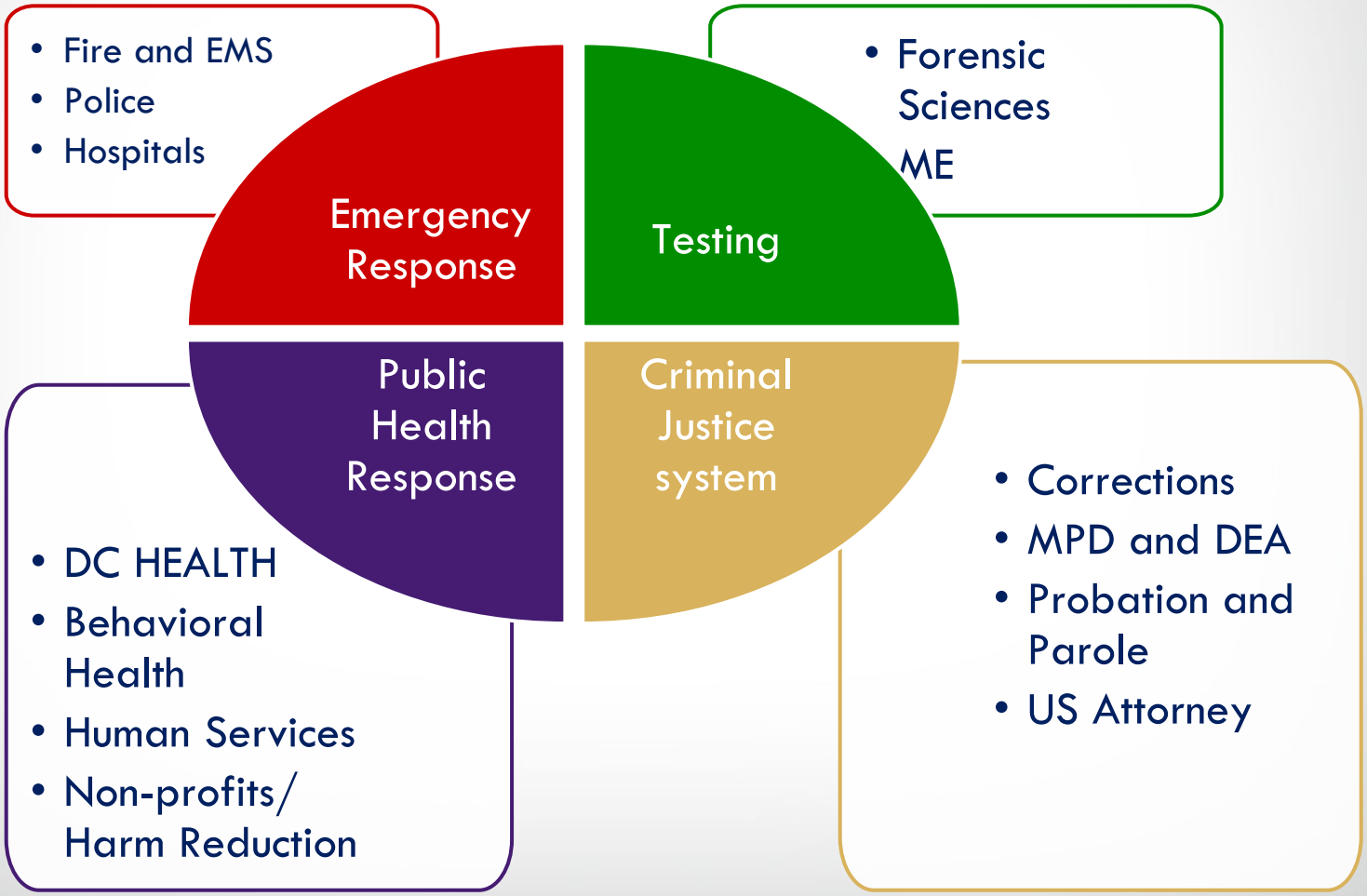
Age Distribution of Opioid Overdose Deaths in DC Compared to the US Population (2021)



Racial Distribution of Opioid Overdose Deaths in DC Compared to the US Population (2021)



DATA EXCHANGE



Key Elements of the D.C. Approach to the Opioid Overdose Epidemic

1. **Build a Big Table:** Convene working groups that involving all relevant disciplines: including public health, public safety, criminal justice, healthcare providers, private entities. Remove barriers to data sharing

2. **Use Big Data**: Leverage large datasets (EMS, Hospital Billing/Discharge Data, Syndromic Surveillance) to identify the problem, track trends

3. **Prevent Death**: Provide useful and timely data to stakeholders and prevention partners

4. **Guide People to Treatment**: Use findings to drive targeted community and individual public health interventions.

ESSENCE SYNDROMIC SURVEILLANCE OVERVIEW

- **ESSENCE** = Electronic Surveillance System for the Early Notification of Community-Based Epidemics
- Monitors health indicators of public health importance in the Emergency Department (ED) and identify outbreaks
- Near real-time de-identified data
  - 7 acute care DC hospitals
  - Data elements include sex, DOB, chief complaint, discharge diagnosis etc.

CUSTOMIZED QUERIES

Acute Opioid Poisoning

- Opioid poisoning ICD9/10 discharge diagnosis code(s)

Acute/Suspected Acute Opioid Poisoning

- Acute opioid poisoning above, OR
- Non-poisoning opioid ICD 9/10 discharge diagnosis code(s) AND overdose/unresponsiveness/poisoning in chief complaint

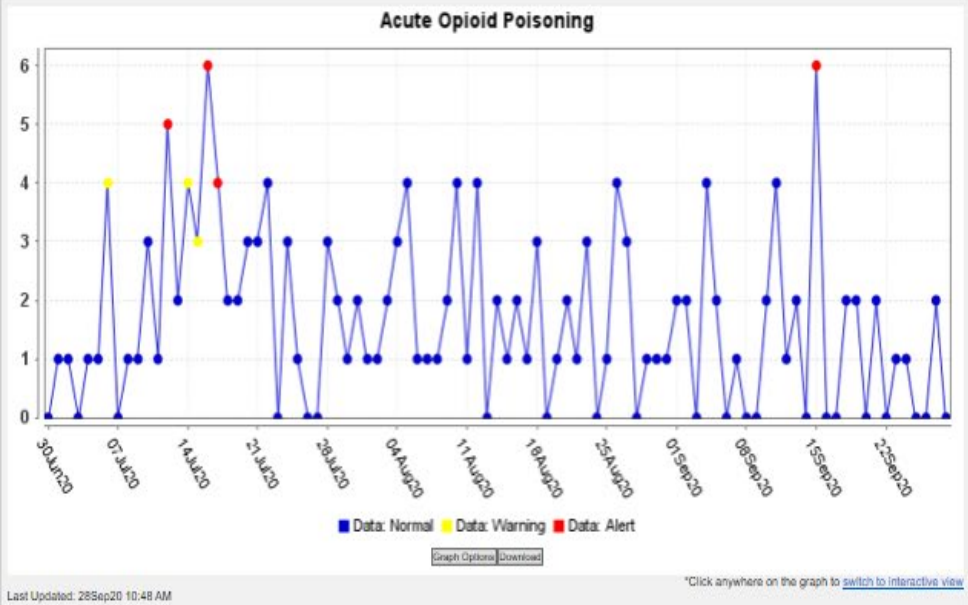
Non-acute Opioid Problem

- Non-poisoning opioid ICD 9/10 discharge diagnosis code(s) AND
- No overdose/unresponsiveness/poisoning in chief complaint

Suspected Overdose-Related Complaint

- Overdose/unresponsiveness/poisoning in chief complaint

Acute Opioid Poisoning



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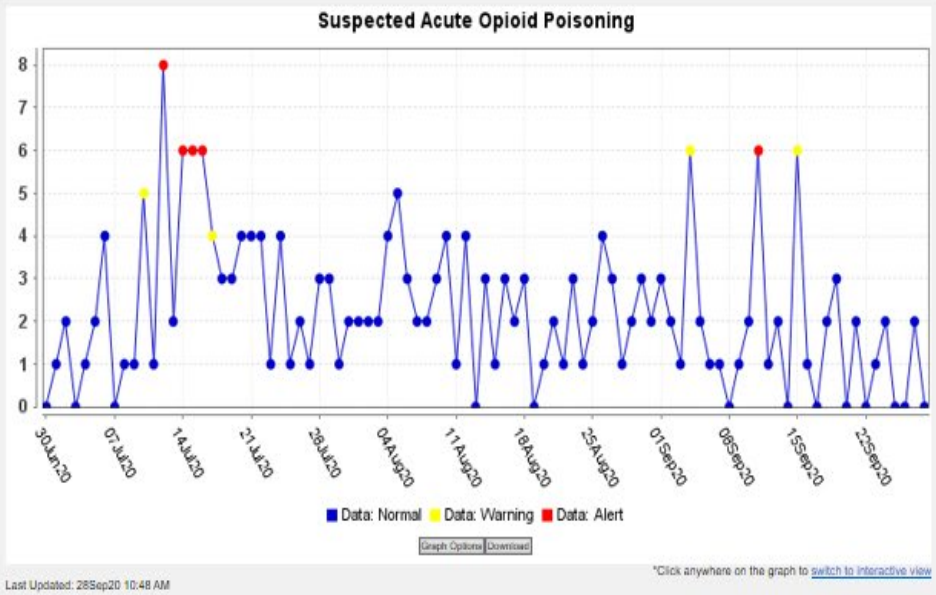
Suspected Acute Opioid Poisoning



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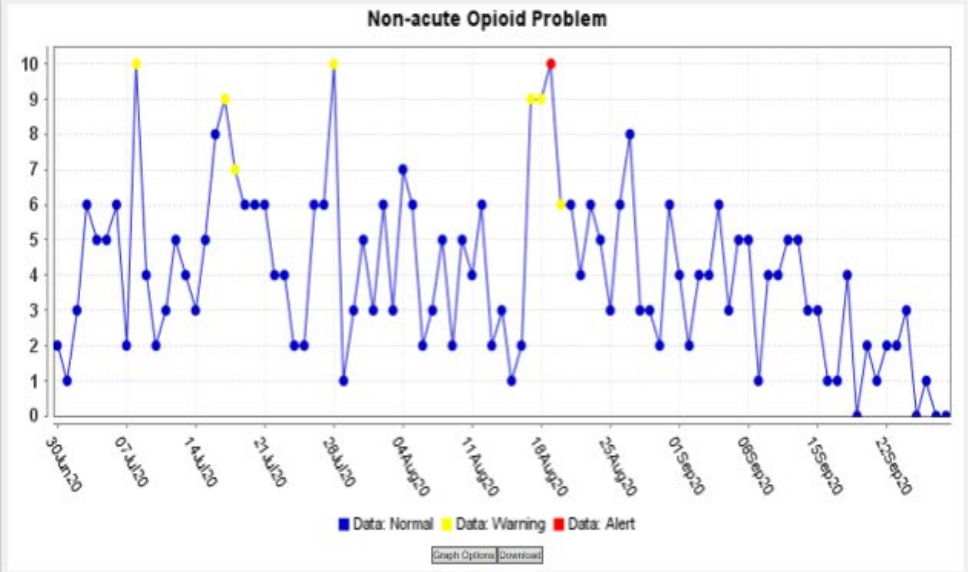
Non-acute Opioid Problem



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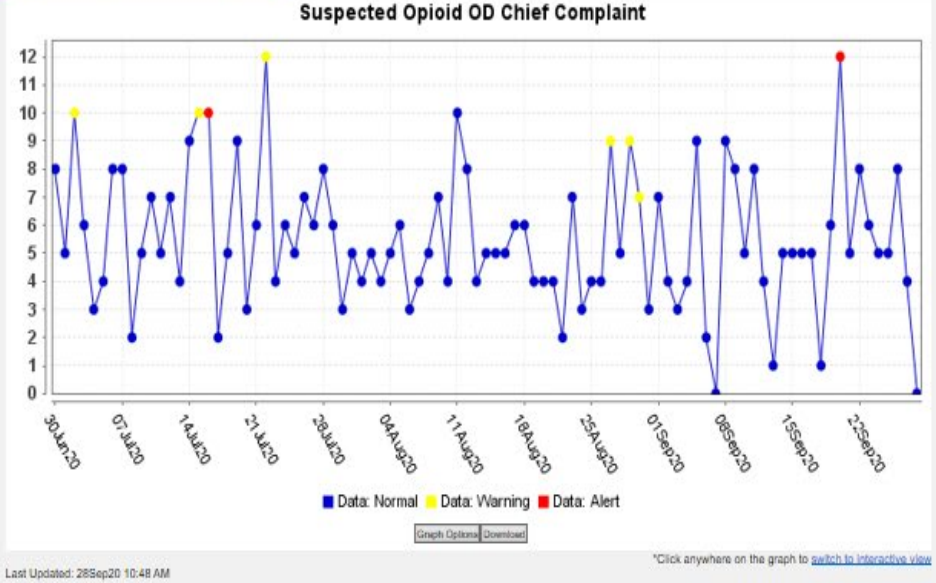
Suspected Opioid OD Chief Complaint



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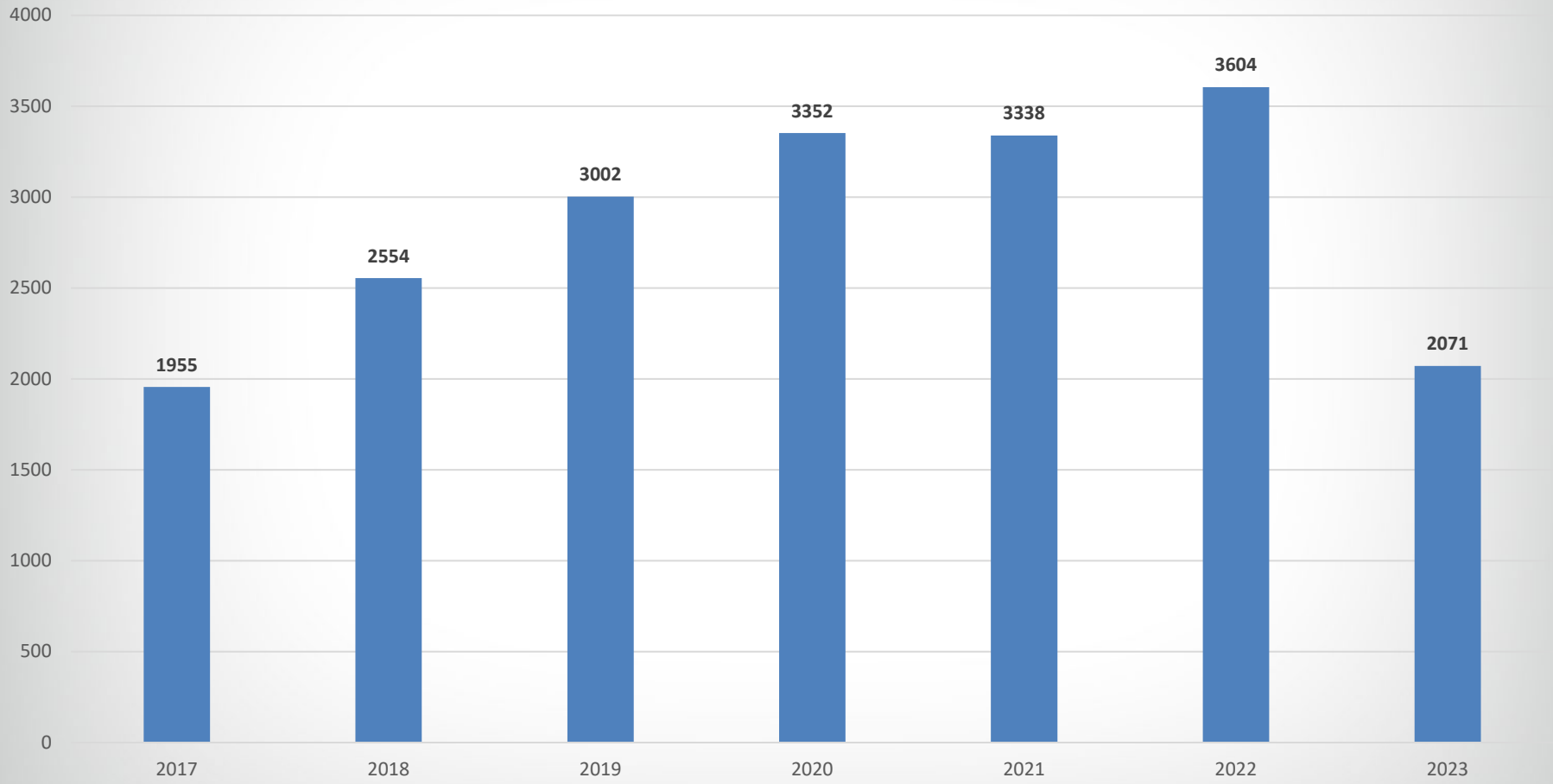
WHY FIRE AND EMS DATA?

- Every firefighter, EMT and Paramedic can give Narcan. Almost complete coverage of overdoses in the city
- X-Y coordinates, actual location
- Identifying information, including date of birth, patient address, even insurance information. Previous encounters can be examined
- Real-time nature of data allows us to use an outbreak model
- Hospital data is insufficient (a large percentage decline transport)

FEMS Overdose Encounters, 2017 to 6/15/23 n=19,876



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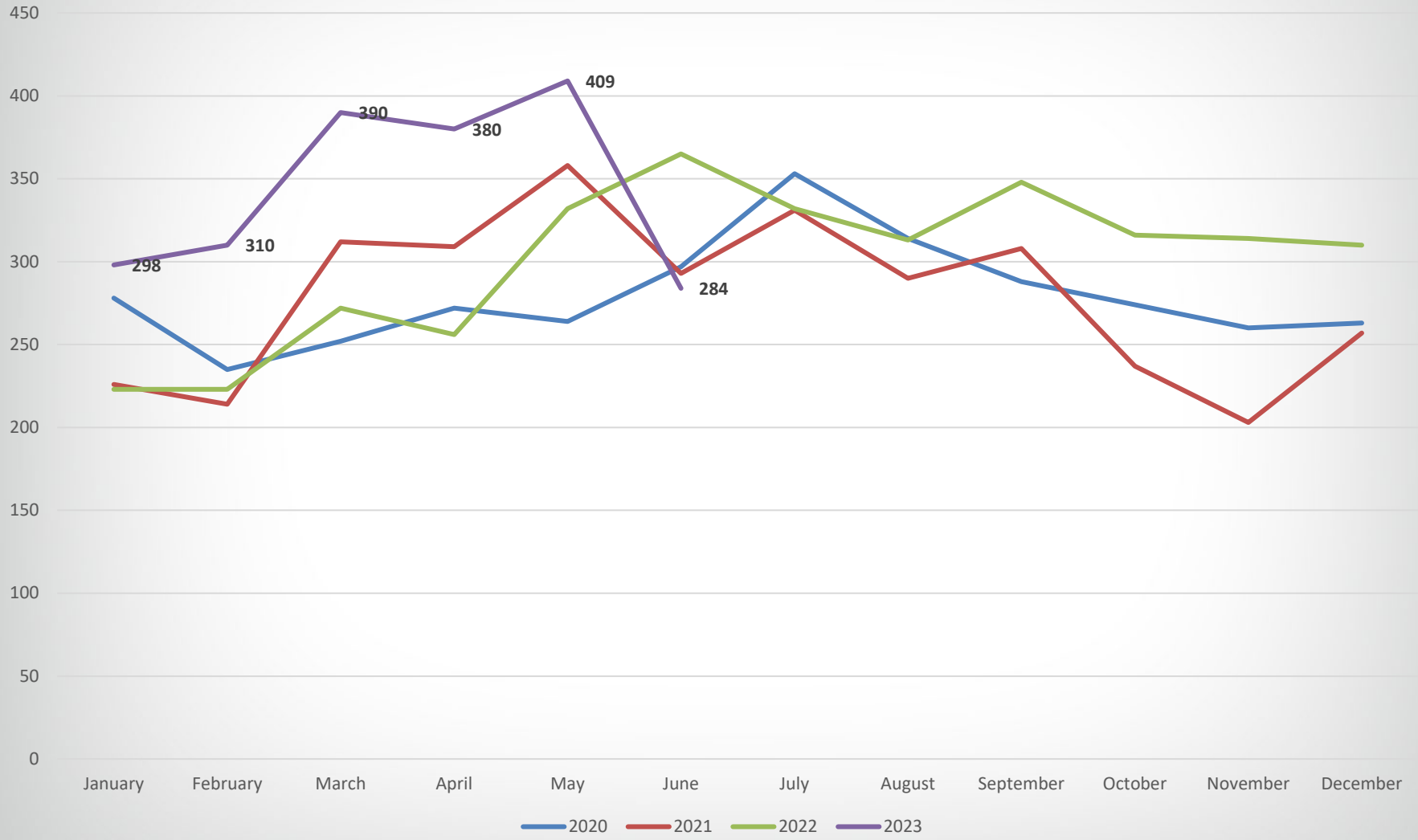
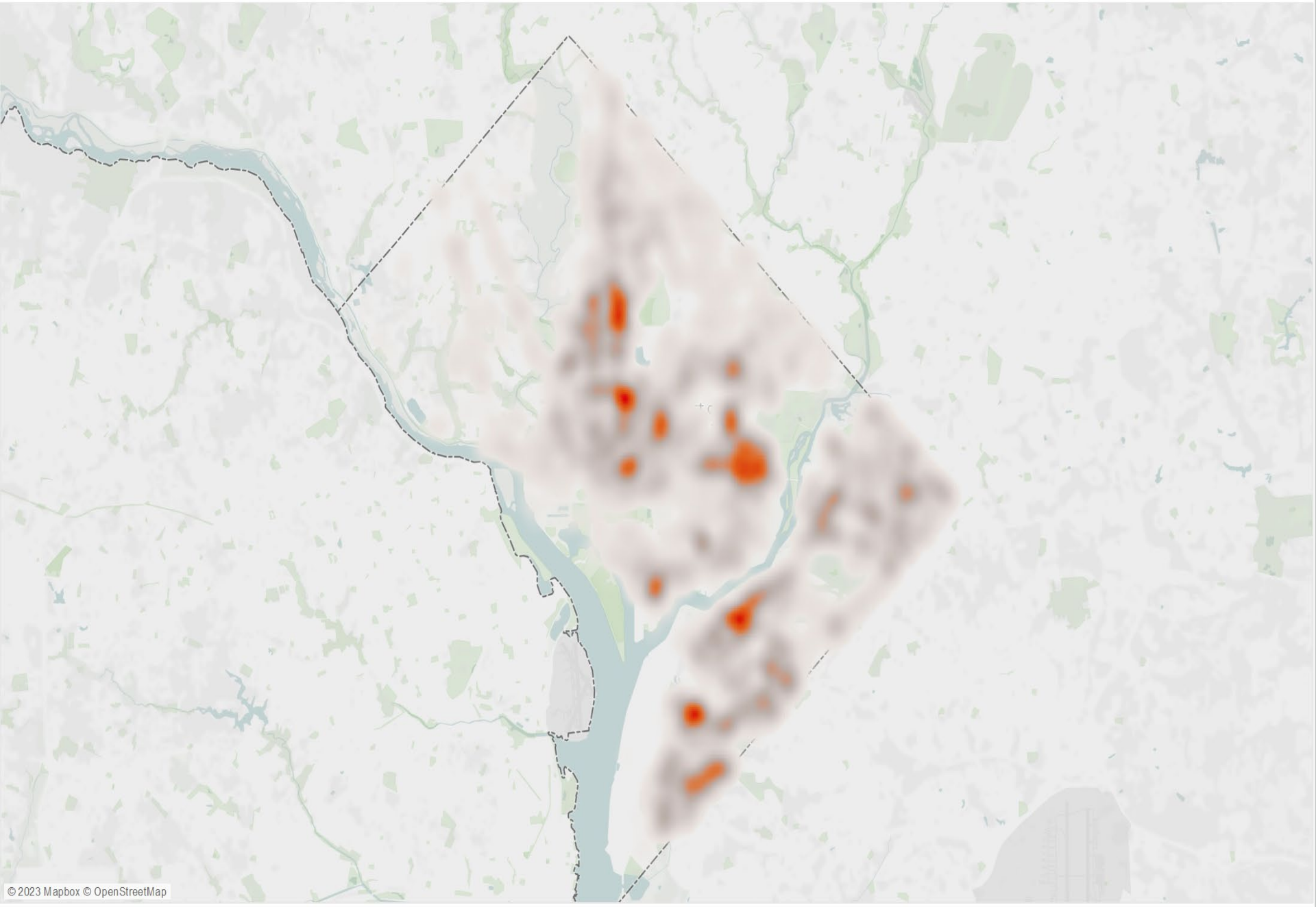
FEMS Overdose Encounters, 2020 to June 2023, n=12,363



FEMS Overdose Encounters



Map based on Lon and Lat.

LINKAGE TO PREVENTION

- 2 key roles :

- Detect and warn of unusual patterns
- Feed data for targeted interventions

- **Our Goals (Surveillance)**

- **Identify** Emerging Threats
- **Estimate** the magnitude of the problem
- **Monitor** risk factors and spread of the problem
- **Evaluate** research priorities/effectiveness of interventions

ODMAP

BENEFITS

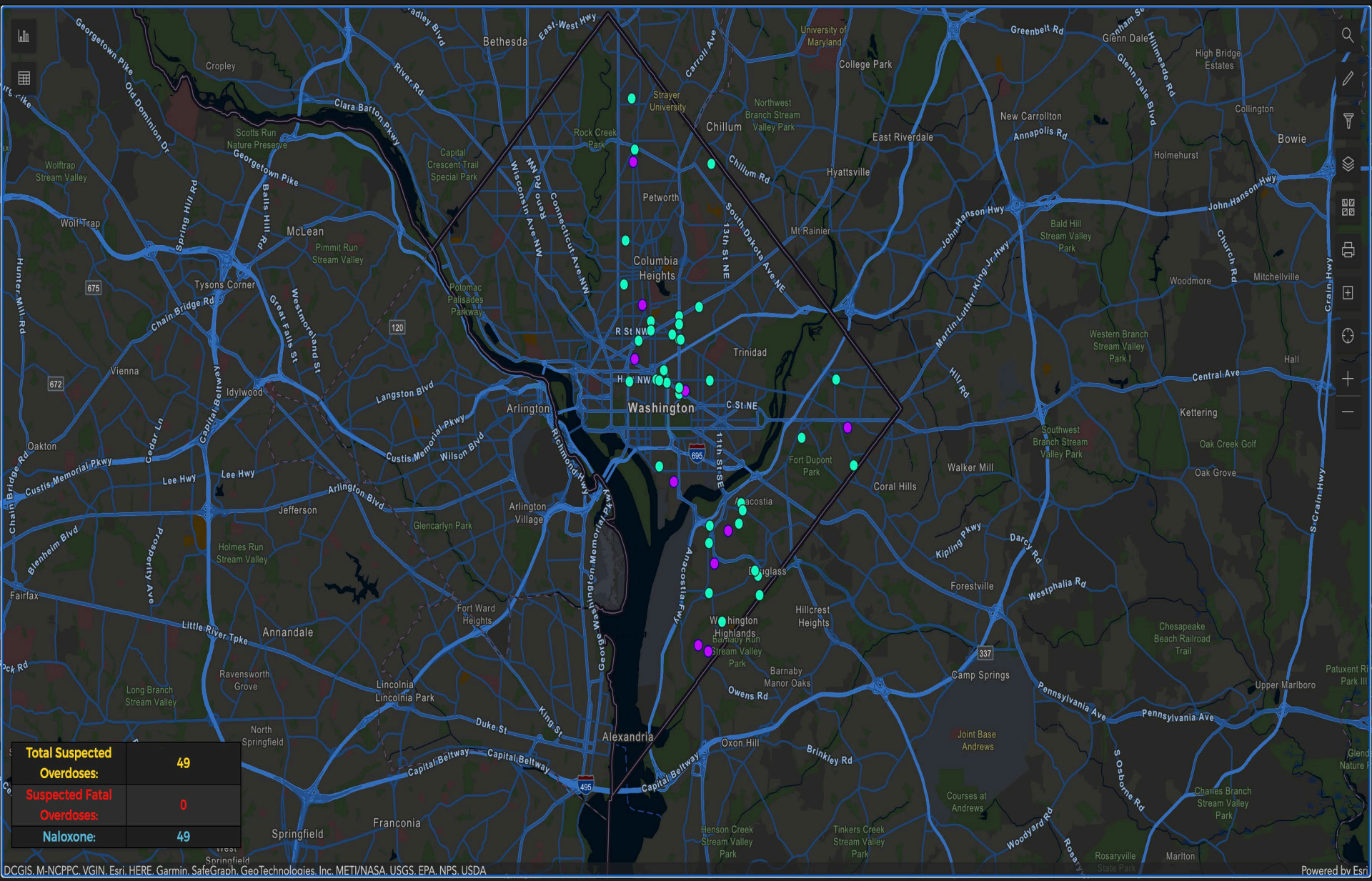
- Easy to use, scrubbed, de-identified
- Fast way to disseminate information and reduce data requests

CONS

- Insufficient information
- Doesn't really address clustering
- Inability to add additional layers – eg service areas, homeless shelters, landmarks

ODMAP
OVERDOSE DETECTION MAPPING APPLICATION PROGRAM

Home | Contact | Overdoses | Manage | National Map | Account



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The District of Columbia is currently in an overdose spike, which means that there has been an unusually high number of non-fatal opioid overdoses in the last 24 hours. The Department of Behavioral Health and community partners are actively deploying resources to impacted areas.

Location of Spike: District of Columbia, District of Columbia
Number of Overdoses: 20
Threshold per 24 hours: 16 Non-Fatal overdose incidents
Requesting Agency: DC Health

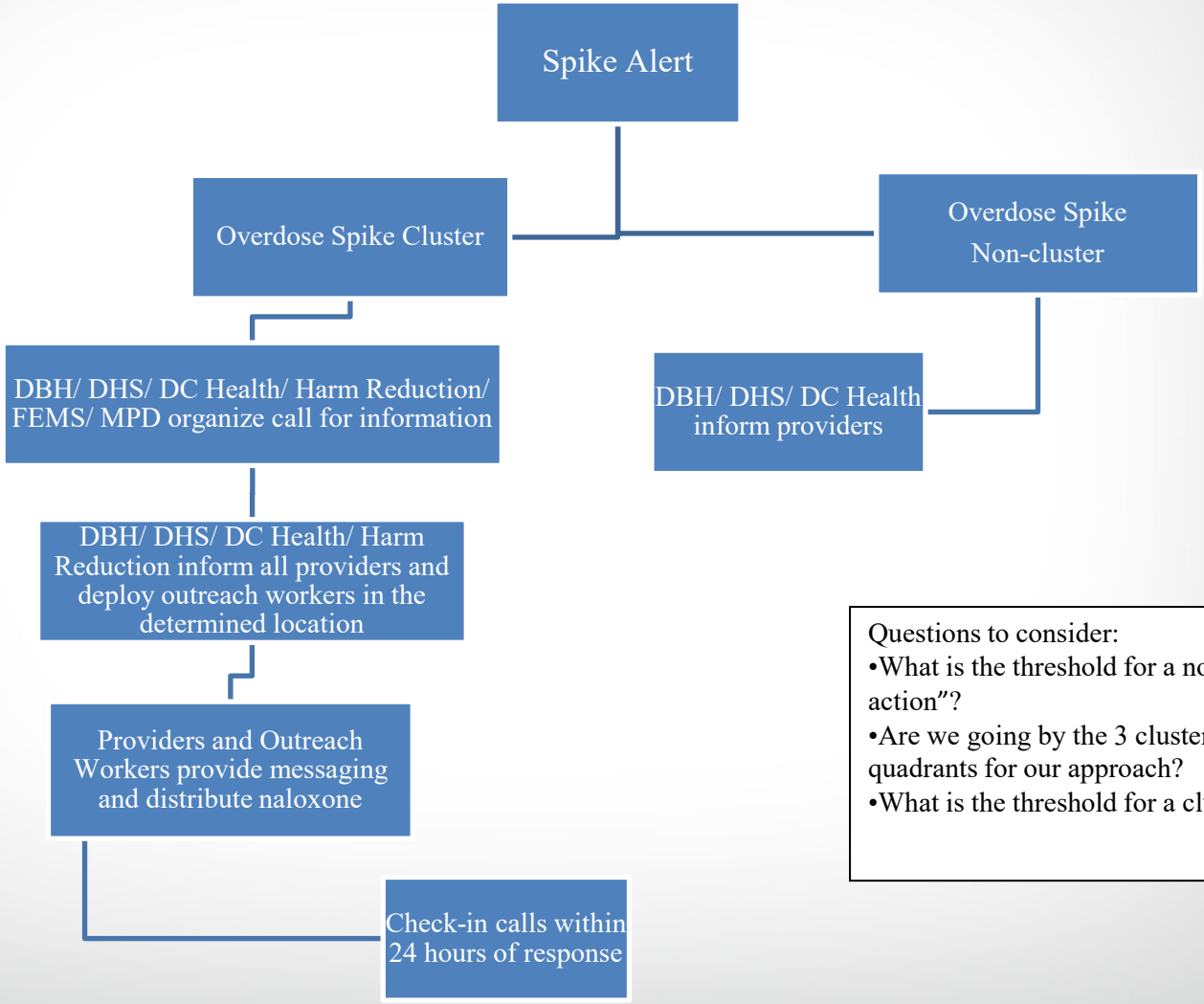
HOW TO JOIN

- Navigate to odmap.hidta.org
-
  - Click register new user
  - Enter information
  - MUST be an active e-mail address
  - Enter WTG8Y37 for the agency code

OVERDOSE RESPONSE FRAMEWORK

List of service providers and their point of contact.

Call information to gather:
- Possibility of the type of drug
- Details of who is overdosing (age, race, housing situation etc.)
- Details of where they are overdosing (street, home, library, etc)
- Determine messaging



Questions to consider:
- What is the threshold for a non-cluster "call to action"?
- Are we going by the 3 clusters, 8 wards, or quadrants for our approach?
- What is the threshold for a cluster?

KEY INFORMATION SHARED

- Name, DOB, Address
- Location of OD
- Past OD in 90 days, if yes # and time in between
- Transport Destination (Induction vs non-induction facility)

- Sadly, we can not get back data on treatment history or clinical information, other than in aggregate form due to 42 CFR

- Internal Dashboard is only shared with DC Government prevention. Currently working to get it to Harm Reduction

- More data can be shared if patients directly opt in. We are piloting that at treatment intake and with some MAT programs

PREVENTION

- DC HEALTH- Peer Responders
- Department of Behavioral Health – Mobile Outreach team, providers, crisis responders
- Department of Human Services- Dedicated outreach staff working in service areas
- Fire and EMS- Overdose reversals, can leave naloxone behind in affected areas
- Harm Reduction – Syringe exchange services, treatment, medical care, wraparound services

UTILITY OF EMS DATA

- Viewing overdoses as an ‘outbreak’
- Flooding staff/resources to provide outreach in hot-spot areas
- Linkage to screening, treatment, support services

  - Can be used for weekly/strategic planning. The more data we share the better our partners can allocate their resources and position their staff.
  - **We have to be careful not to stigmatize neighborhoods or drive demand. Very fine line, but mostly avoided by taking a harm reduction approach. Telling people why they need naloxone and where to find it is our main focus.**

OTHER DATA SOURCES

- Prescription Drug Monitoring Program (PDMP)
- SUDORS – State Unintentional Drug Overdose Reporting System
- Opioid Fatality Review Board
- Treatment/ MAT data
- Arrest Data

QUESTIONS/COMMENTS?