A virtual learning series for public health leaders.

Trends in Overdose Data During COVID-19

ASTHO OD2A Learning Community Session

June 11, 2020
Agenda

3:00 PM – 3:05 PM
Welcome & Introductions

3:05 PM – 3:10 PM
ASTHO Opportunity: Learning Community on Opioid Preparedness

3:10 PM – 3:45 PM
ODMap: Harnessing Data to Develop Data-Driven Overdose Response Strategies

3:45 PM – 4:00 PM
Q&A Round and Discussion on OD Data Trends, Challenges, and Analyses

4:00 PM
Closing

ASTHOConnects
A virtual learning series for public health leaders.
ASTHO Opioid Preparedness Learning Community: Response to Pain Clinic Closures

• Purpose: To increase state and territorial capacity to prepare for and respond to pain clinic closures

• Commitment: Participation in four ASTHOConnect webinars, and working with a team to draft a protocol

• For more information contact: Richa Ranade, Director, Social and Behavioral Health, ASTHO: rranade@astho.org

Thank you!
Speakers

**Aliese Alter**

Senior Program Manager – Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA)

In her role as Senior Program Manager, she is responsible for the overall management of ODMAP and Case Explorer, including outreach, program development, implementation and national partnerships. Aliese is responsible for interfacing with partners representing government, law enforcement, and public health nationally to support data driven efforts to reduce overdoses, as well as facilitate information sharing. Prior to joining the W/B HIDTA, Aliese served as a Detective in Richmond, VA. During her career, she held a variety of assignments to include: Patrol, Recruitment, and Special Victims Unit. Aliese has a Bachelor's degree in Business Management from Longwood University; and is currently enrolled in a Master of Science program in EMS Systems Management from the University of Maryland, Baltimore County, with an anticipated graduation date of May 2021.

**Christopher Yeager**

Overdose Detection Mapping Application Program (ODMAP) Data Research Analyst – Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA)

Christopher’s role is to impact the opioid crisis in a meaningful way by developing insightful, practicable analyses and visualization products to support data-driven policy development and response strategies, utilizing the unique syndromic surveillance data provided by ODMAP. Christopher also provides analytical support to partner agencies, and acts as a liaison to academic research affiliates. Before joining ODMAP, Christopher worked as a Criminal Data Research Analyst for the City of Baltimore, assisting in the implementation of data driven policing models. Christopher spent seven years as a sworn police officer, serving with distinction in multiple jurisdictions, prior to assuming the role of analyst. Christopher has a bachelor’s degree in Criminology from the University of Maryland, College Park and is currently pursuing a master’s in Data Science from the University of Maryland.
HARNESSING DATA TO DEVELOP DATA-DRIVEN OVERDOSE RESPONSE STRATEGIES

With ODMAP & Diverse Partnerships
“Who will keep the public safe and healthy?”
The Problem

- Increase in lethal drugs on the streets – Fentanyl
- Lack of real time data and non-fatal reporting
- Insufficient information sharing
- No consensus on what constitutes a spike
- Resources/$$

ODMAP
OVERDOSE DETECTION MAPPING APPLICATION PROGRAM
A BRIEF HISTORY OF ODMAP

ODMAP provides near real-time suspected overdose surveillance data across jurisdictions to support public safety and public health efforts.

JAN 2017
A pilot begins in areas of West Virginia and Maryland.

APRIL 2017
ODMAP becomes available nationally.

<20 SIGNED AGREEMENTS

JULY 2017
ODFORM feature added.

JUNE 2017
Florida ODMAP legislation enacted.

APRIL 2018
Maryland ODMAP legislation enacted.

JULY 2018
Maryland is the first state to complete statewide EMS API transmission.

OCT 2018
Oklahoma AG and OB announce statewide efforts.

>628 SIGNED AGREEMENTS

FEB 2019
New Jersey initiates statewide efforts of ODMAP & ODFORM.

MARCH 2019
Maine initiates statewide ODMAP efforts.
West Virginia ODMAP legislation enacted.

JUNE 2019
Nevada and Connecticut initiate statewide efforts.
BJA funds ODMAP.

1,995 SIGNED AGREEMENTS

AUGUST 2019
Illinois ODMAP legislation enacted.

SEPT 2019
8 states (CT, FL, GA, MN, NJ, NV, OH, RI) selected for BJA & CDC ODMAP Statewide Expansion and Response Grant Initiative.

JUNE 2020
More than 3,100 signed agreements.
More than 25,000 users.
More than 27,000 suspected ODs.
More than 50 agencies utilizing the API.
Data Entry
National Map
National Map: Overlays
ODMAP Nationally

- Number of participating states: 49, DC, and Puerto Rico
- Number of participating agencies: over 3,000
- Number of ODMAP users: Nearly 30,000
- Number of states with statewide implementation: ≈15
- Number of suspected overdoses entered: Over 270,000
ODMAP
Nationally:
Statewide Implementation
ODMAP in Action

Best Practices & Case Studies
Partnership between Erie County Public Health Department and Cheektowaga Police Department:

- Began using ODMAP in August 2017
- Once CPD responds to an overdose, the responding officer leaves:
Case Study: Erie, NY

Erie County Health Department reviews ODMAP daily for new submissions

- Health Department assigns a peer support specialist to each OD
- Peer specialist provides subject with treatment options if interested and trains family/friends on naloxone administration and provides naloxone
Case Study: Connecticut

DT EMS SWORD
Statewide Opioid Reporting Directive Newsletter

May 2020, Issue XI

SWORD Statewide Reporting April 2020
In the month of April 2020, there were 304 calls into the CT Poison Control Center (CPCC). Of these calls, 274 were non-fatal and 30 resulted in fatalities. There were 243 total naloxone administrations: 173 non-fatal multiple doses of naloxone administered, 57 non-fatal single dose naloxone, and 44 non-fatal with no naloxone administered. Of the 30 fatalities, eight (11) received multiple doses of naloxone, one (2) were given a single dose, and eighteen (17) with no naloxone administered. The gender breakdown for the state is: Male (221); Female (84) and (3) unknown. The 304 cases involved suspected overdoses from all of our counties: Fairfield (34), Hartford (99), Litchfield (19), Middlesex (18), New Haven (80), New London (26), Tolland (12), and Windham (16). The age breakdown of the patients is as follows: 0 to 24 years of age (28); 25 to 34 years of age (33); 35 to 44 years of age (71); 45 to 54 years of age (70); 55 to 64 years of age (43); 65 years of age and older (7); age unknown (4).

*Numbers subject to change
*TIP: Store the CPC number in your cell for ease of use! 1-800-222-1222

ODMAP
OVERDOSE DETECTION
MAPPING APPLICATION PROGRAM

April, 2020 ODMAP Suspected OD Submissions by day.
This graph shows total suspected overdoses called in each day during the time period. The red line running horizontally shows a 3-day moving average of call-ins.

Cumulative (June—April 30, 2020) Overdoses by the Hour of the Day
This graph shows the hour of the day suspected overdose incidents have occurred statewide since the SWORD program began on June 1, 2019.

*Note: All data in this newsletter comes from reports made by CT EMS and can be viewed in ODMAP Level 2*
Case Study: Recent Press Releases

SHELBY COUNTY COMMUNITY RESPONSE TO DRUG OVERDOSE SPIKE

SHELBY COUNTY, TN – The Shelby County Opioid Task Force, the Shelby County Health Department, the U.S. Attorney’s Office, the Shelby County District Attorney’s Office, and S.T.O.P. (Street Team for Overdose Prevention) have planned a county-wide response to the recent unprecedented increase in drug overdoses, both fatal and non-fatal, in our community.

The Shelby County Health Department monitors drug overdose activity in Shelby County by tracking incidents reported by first responder organizations and the West Tennessee Regional Forensic Center in a database called ODMAP. ODMAP allows SCHD to collect both suspected fatal and non-fatal overdose activity in real time across jurisdictions in Shelby County. Yesterday, the Shelby County Health Department issued a new overdose spike alert for the 33-day period from April 13, 2020 to May 15, 2020. In that period there were a total of 437 suspected overdose events, 68 of which were fatal.

“We are seeing an unprecedented spike in drug overdose activity in Shelby County. The recent COVID-19 crisis has added to the already existing opioid epidemic. Opioid overdoses have grown dramatically over the last few years across our state. The rural areas of our state have been hardest hit, but so has Memphis and Shelby County. Unfortunately, it’s getting worse. That’s why we must all do our part to be watchful and report any signs of overdose to 911. Our first responders are prepared to provide immediate treatment, such as access to Narcan, which can reverse and overdose and save lives. Shelby County is prepared to provide supports for long-term recovery.”

This spike in fentanyl overdoses is unprecedented, and demands an immediate multi-disciplinary response,” said U.S. Attorney Michael Dunavant. “Together with law enforcement, first responders, and our community health professionals, we are working tirelessly to identify and stop the sources of supply, punish and deter fentanyl dealers, prevent new users, refer addicts to treatment, deploy Narcan to hotspots, and save lives.”

District Attorney Amy Weirich said, “Dealers of deadly drugs have been hard at work over the last 60 days. Our friends and family members are overdosing and dying at a record pace. We can reverse this trend through reducing demand and removing suppliers from society. As prosecutors, we will continue our focus on bringing these death dealers to justice. We need the community’s help in raising awareness about the seriousness of the problem and the dangers of these drugs. A dose of Abraham Lincoln’s nose is a penny enough to kill you.”

The Street Team for Overdose Prevention (STOP) will provide street-level outreach at locations around Shelby County this week, May 19-23, 2020, to address the recent spike in drug overdoses.

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Case Study: Overdose Response Team

"The Oneida County Overdose Response Team has identified a spike in overdoses using the Overdose Detection Mapping Application Program (ODMAP)."

Source: https://ocgov.net/content/oneida-county-overdose-response-team-issues-overdose-spike-alert-1
Recent Analyses

Concurrent National Public Health Emergencies
Data Challenges

- Many state and local governments have never captured non-fatal suspected overdose data previously eliminating a control data set;
- Drug trends are continually evolving due to the rapid introduction of synthetic analogs, which complicates the use of historical data as a predictor of future overdose trends;
- ODMAP defers to state and local agencies in the definition of "suspected overdose," and variations in this definition impact data consistency across jurisdictional boundaries;
- Some participating regions either fail to report or are inconsistent in reporting suspected overdoses to ODMAP;
- The impact of COVID-19 is still unknown due to delays in both testing and test results; and
- Correlation does not imply causation
Analysis: May, 2020

- Applied the Autoregressive Integrated Moving Average (ARIMA) model, which has been used to forecast COVID-19 instances nationally, evaluate both infectious and non-infectious diseases, and to identify and estimate significant temporal clusters in overdose surveillance.

- ODMAP submissions from July 15, 2018 to May 6, 2020 were analyzed using the ARIMA model which would not have forecasted the increase in overdose activity currently present in the ODMAP submissions since the onset of COVID-19.

Analysis: June, 2020

• The W/B HIDTA, in partnership with The Johns Hopkins Applied Physics Laboratory, continues to derive parameters for the SaTScan space-time permutation model for optimal detection of anomalous clustering of suspected overdose submissions in geography and time.

  • Since March 1, 2020, several geographic areas have experienced levels of ODMAP submissions that would not have been expected based on ODMAP spatiotemporal data. Data since Jan 1, 2019 used as baseline/control.

What Does This Mean?

• The United States is facing **two concurrent national public health emergencies**. Given this rare occurrence, combined with the rapidly-evolving qualitative and quantitative factors, several factors could account for the findings above. Some of these factors, which present challenges in analyzing overdose trends since the onset of COVID-19, are:
Help ASTHO evaluate
The Trends in Overdose Data During COVID-19 Webinar
on your device now!
A virtual learning series for public health leaders.