Community Response Survey for Suspected Drug Overdose Anomalies

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Innovative Surveillance CoP Local Outbreak Detection
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Ohio Syndromic Surveillance: EpiCenter

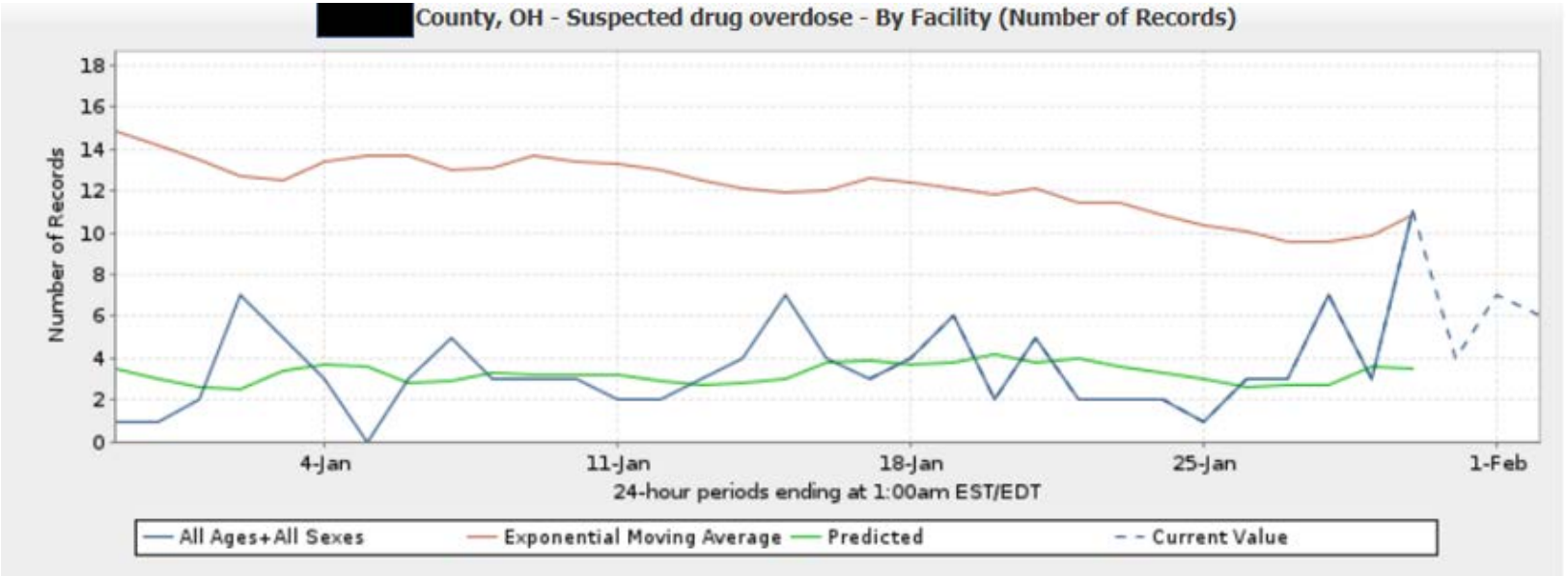
- Bio-terrorism events, disease outbreaks, injuries, etc.
- Began anomaly detection for drug-related emergency department (ED) events in 2015
  - Traumatic Injury Drug Classifier: any mention of overdose, withdrawal, abuse, drugs, etc.
- Refined case definition implemented in 2019 for anomaly detection
  - Suspected Drug Overdose Classifier
  - Developed as part of the CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) grant
  - Minimized false positives

Anomaly Detection

- Anomaly alert generated when overdose ED visits within a 24-hour rolling period exceed the expected number for that time and location
- Ohio counties assigned to one of three anomaly detection groups
  - Groups 1 & 2:
    - Constant thresholds of 5 or 8 events
    - Counties with smaller numbers of historical overdose ED visits
  - Group 3:
    - Analysis method in conjunction with a minimum threshold of 8 events
    - Counties with larger number of historical overdose ED visits

Follow-up Process Prior to Survey Implementation

- Contact Local Health Department (LHD) epidemiologist
  - ➢ Identification of any novel concerns
  - ➢ Need for naloxone or other assistance from the Ohio Department of Health (ODH)
- Notify state partners of the alert
  - ➢ Basic anomaly details (date, number of visits, threshold, detection method, etc.)



Suspected Drug Overdose Anomaly Alert Survey

- REDCap survey developed in 2019 to coincide with beginning of Overdose Data to Action (OD2A) grant
- Designed to assess county responses to suspected drug overdose anomalies
  - LHD anomaly investigation/analysis
  - Community response measures
  - Local partner involvement
  - Need for naloxone among local agencies and/or LHD

https://odh.ohio.gov/know-our-programs/violence-injury-prevention-program/media/communityresponseplantemplate

Suspected Drug Overdose Anomaly Alert Survey

Did your health department investigate the alert (i.e., review EpiCenter data and/or other data sources)?

◯ Yes
◯ No

Briefly describe why the alert was not investigated.

_____

Please upload a copy of the analysis of the alert.

Did this anomaly reflect an increase in overdose events in the anomaly's 24 hour period compared to previous time periods (e.g., not due to false positives)?

◯ Yes
◯ No

Please describe why your health department determined there was not an increase.

_____

Does your health department have a written community response plan for increases in suspected drug overdose (drug anomalies from EpiCenter)?

◯ Yes
◯ No

Please upload the most recent copy of your community response plan if you have not done so in a previous Suspected Drug Overdose Anomaly Survey.

Was any response activated to your county's most recent EpiCenter alert for drug overdose ED visits?

◯ Yes
◯ No

Briefly describe why a response was not activated.

_____

Suspected Drug Overdose Anomaly Alert Survey

Please check all boxes that apply. Did any of the following agencies:

	LHD	Coroner/ME	Law enforcement	EMS	Local mental health agency(ies)	Other partner(s)
Report an increase in suspected OD deaths, dispatches, calls/runs, etc. around the time of the anomaly?	☐	☐	☐	☐	☐	☐
Provide feedback/information about the suspected substances involved?	☐	☐	☐	☐	☐	☐
Provide any additional information to help verify the anomaly?	☐	☐	☐	☐	☐	☐
Equip staff with additional naloxone or naloxone kits?	☐	☐	☐	☐	☐	☐
Activate a post-overdose response team equipped with referral resources?	☐	☐	☐	☐	☐	☐
Provide direct outreach to people who use drugs with harm reduction messaging?	☐	☐	☐	☐	☐	☐
Provide naloxone kits to clients, family members, general community?	☐	☐	☐	☐	☐	☐
Send out a public announcement (e.g., press release, alert, social media post)?	☐	☐	☐	☐	☐	☐
Activate a peer support team to link people with substance use disorder to treatment and/or naloxone?	☐	☐	☐	☐	☐	☐
Respond with any other activities?	☐	☐	☐	☐	☐	☐

Suspected Drug Overdose Anomaly Alert Survey

Please check all boxes that apply.

	Assessed need for naloxone	Provided them with naloxone
Emergency department	☐	☐
EMS	☐	☐
Law enforcement	☐	☐
Project DAWN(s)	☐	☐
Substance use treatment center(s)	☐	☐
Other	☐	☐

If "other," please specify. _____

Was naloxone requested from the Ohio Department of Health (ODH) and/or the Ohio Department of Mental Health and Addiction Services (Ohio MHAS) as a result of this anomaly?

- ◯ Yes, from ODH
- ◯ Yes, from Ohio MHAS
- ◯ Yes, from both
- ◯ No
- ◯ Not applicable (We did not need naloxone)

Did your county request state assistance for anything other than naloxone?

- ◯ Yes
- ◯ No

Please describe the state assistance requested and the result of that request.

_____

Suspected Drug Overdose Anomaly Alert Survey

Were any novel or emerging concerns identified related to this anomaly?

- ◯ Yes
- ◯ No
- ◯ Unknown
- ◯ Not applicable (not a true anomaly)

Please describe any novel or emerging concerns identified.

_____

Did your agency contact the Ohio Department of Health (ODH) related to this EpiCenter alert?

- ◯ Yes
- ◯ No

Please provide any additional relevant information identified through the investigation and response for this anomaly, such as substances involved, local response, state response or assistance needs.

_____

Please describe the impact, if any, that EpiCenter alerts for drug-related anomalies are having on your community.

_____

Please upload any press releases or any additional information about the drug anomaly.

Survey Responses

- Responses submitted within 24 hours (reminders if needed)
- Email to state partners
  - Basic anomaly details
  - Summary of the county's community response measures and local partner involvement
  - Updated as more information is received

EpiCenter Anomalies for Suspected Drug Overdose ED Visits from 12/19/2020 - 12/25/2020

Status	Date of Anomaly	County	# of ED Visits	Predicted # of Visits[1]	Alert Threshold[2]	Community Response[3]
Updated	12/20/2020	[redacted]	13	3.79	12.59	Based upon their analysis, [redacted] determined it was not necessary to initiate a response. They did not require assistance or additional naloxone from ODH.
Updated	12/19/2020	[redacted]	15	6.43	14.90	[redacted] activated post-overdose response teams, provided direct harm reduction outreach to people who use drugs, provided naloxone kits, and activated peer support teams to link people with substance use disorder with treatment and/or naloxone. They did not require assistance or additional naloxone from ODH.
Updated	12/19/2020	[redacted]	24	8.65	23.48	[redacted] sent out a public announcement and assessed local law enforcement's need for naloxone. Law enforcement provided additional naloxone to staff. Local mental health agencies provided naloxone to the public and direct harm reduction outreach to people who use drugs. [redacted] Quick Response Teams were activated. [redacted] did not require assistance or additional naloxone from ODH.

1. N/A: Predicted number of visits is not calculated when the alert detection method is a constant threshold.
2. CT = Constant Threshold. For most counties, a detection method with a constant threshold of 5 or 8 is used. When the number of suspected drug overdose encounters is equal or above the threshold in a 24-hour period, an anomaly is triggered.
3. Local Health Departments will submit their community responses to individual anomalies via a survey. This table will be updated as responses are received.

Survey Analysis

Drug Anomaly Alert REDCap Survey, September 2019 - December 2020

County	Anomaly Alerts		Survey Responses*							
	Number of Alerts	Percentage of Total Alerts	Number of Completed Surveys[1]	Number of Alerts Identified as True Anomalies	Percentage of Alerts Identified as True Anomalies	Number of Alerts to Which County Issued a Response[2]	Percentage of Total County Alerts to Which County Issued a Response	Key Activities Implemented[3] (Number of Alerts)	Partners Involved[4] (Number of Alerts)	County Has a Response Plan
[redacted]	1	1%	1	1	100%	0	0%	--	--	Y
	9	8%	8	4	50%	1	13%	Assessed the need for naloxone in agencies such as EMS, law enforcement, Project DAWN, emergency rooms, and substance use treatment centers. (3) Worked with the coroner to verify anomaly. (1) Notified community partners. (1)	Local Health Department (3) Coroner (1)	Y
	2	2%	2	0	0%	0	0%	--	--	Y
	1	1%	1	0	0%	0	0%	--	--	--
	7	6%	7	3	43%	7	100%	Notified local partners, including EMS, hospital systems, and peer support and quick response teams. (5) Assessed law enforcement's need for naloxone. (3) Released a public announcement. (2) Worked with the coroner to verify anomaly. (1) Activated Quick Response Teams (1) Provided direct outreach to people who use drugs with harm reduction messaging. (1) Provided naloxone to the public. (1)	Local Health Department (6) Coroner (5) Law Enforcement (1) Local Mental Health Agencies (2) Other: [redacted] Quick-Response Team (1)	Y
	2	2%	2	2	100%	0	0%	Gathered relevant information from law enforcement and healthcare providers. (1) Notified local partners. (1)	Local Mental Health Agencies (1	Y
	7	6%	7	4	57%	4	57%	Released public announcements, which included information on resources and support. (4) Activated post-overdose response and peer support teams. (3) Provided direct outreach to people who use drugs with harm reduction messaging. (3) Assessed the need for naloxone among local agencies. Supplied additional naloxone as needed. (2) Worked with the coroner to verify anomalies. (1) Distributed naloxone to the public. (1) Notified community partners. (1)	Local Health Department (4) Coroner (2) Law Enforcement (2) EMS (2) Local Mental Health Agencies (2)	Y

Contact Information

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