CSTE

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Public Health Drug Overdose Surveillance Training Series for Local/Territorial Jurisdictions

**Cumulative Evaluation Report** 

May 2021

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#### Background

In 2019, the Council of State and Territorial Epidemiologists (CSTE) developed a series of multistate drug overdose surveillance training workshops for public health teams conducting drug overdose surveillance in the twenty (20) state jurisdictions funded by the CDC cooperative agreement, Enhanced State Opioid Overdose Surveillance (ESOOS). CDC's National Center for Injury Prevention and Control (NCIPC) managed this cooperative agreement with the purpose to provide more timely and comprehensive data on fatal and nonfatal opioid overdoses and risk factors associated with fatal overdoses<sup>1</sup>. Since then, CDC NCIPC has offered a new, more comprehensive funding program to support drug overdose surveillance and expanded the types of supported jurisdictions to include local and territorial jurisdictions. Overdose Data to Action (OD2A) supports jurisdictions in collecting high-guality, comprehensive, and timely data on nonfatal and fatal overdoses<sup>2</sup>.

CSTE partnered with NCIPC and the consultant team Allyson Kelley and Associates (AKA) to develop a virtual drug overdose surveillance training series targeted for local and territorial jurisdictions to offer these newly funded jurisdictions an opportunity for training on key drug overdose surveillance skills and collaboration with their peers.

Originally planned as three-day in-person experience, the learning series was shifted to a monthly fully virtual experience due to COVID-19 related restrictions on travel and convenings. CSTE invited OD2A recipients in the nineteen (19) jurisdictions representing local and territorial jurisdictions to participate in the training series free of charge. CSTE encouraged participants to attend the series with team members from their agency including epidemiologists, analysts, program coordinators, evaluators, and key community partners.

This report describes evaluation findings based on data collected from learning lesson evaluations, semi-structured key-informant interviews, and administrative documents. The critical evaluation question this report answers is:

> "What was the value of the public health drug overdose surveillance training series on jurisdictions, CSTE, CDC, and other stakeholders?"

1. Centers for Disease Control and Prevention (2020). Enhanced State Opioid Overdose Surveillance. Available from Enhanced State Opioid Overdose Surveillance| CDC Injury Center

2. Centers for Disease Control and Prevention (2020). Overdose Data to Action. Available from: Overdose Data to Action | Drug Overdose | CDC Injury Center

#### Purpose

The training series sought to enhance the drug overdose surveillance capacity of public health agency staff and partners. Series developers recognized that the newly funded target audience comprised many new staff unfamiliar with drug overdose surveillance conventions and common challenges. Content for the training series came from a needs assessment conducted in October 2020 targeting local and territorial jurisdictions funded by OD2A and some content from the 2019 CSTE Drug Overdose Surveillance Learning Series.

#### Design

CSTE and AKA worked with CDC NCIPC team of drug overdose surveillance and prevention subject matter experts (SMEs) to design the learning series. AKA comprised a two-person team of Allyson Kelley, DrPH and Bethany Fatupaito, MPH who are skilled public health educators with experience in evaluation and cross-sectional collaboration for community engagement. During development, the target audience identified the need to include more topics on machine learning and data visualization, which was sub-contracted to an external two-person team of SME's with experience in these topics; Prashanti Manda, PhD and Somya Mohanty, PhD. AKA developed agendas for each lesson in the training series using Principles of Andragogy – need to know,

experience, self-concept, readiness to solve immediate problems, and problem orientation.<sup>3</sup> Each lesson curriculum scheduled didactic and engaging activities for 90 minutes with a 5-minute self-care break scheduled at the halfway mark. Participants received supplemental materials during the lesson and in follow-up emails.

#### **Participant Invitations and Selection Process**

The Center for Disease Control and Prevention (CDC) has funded forty-eight (48) states under the OD2A funding stream. Within these states, sixteen (16) local jurisdictions have been funded to further aid in surveillance and prevention efforts. The Principle Investigator in the sixteen (16) local jurisdictions was invited to the training series along with principle investigators in the three (3) US territories: District of Columbia, Puerto Rico, and Northern Marianas Islands. CSTE invited the nineteen (19) jurisdictions via an email that included a link to complete an interest form to collect details on prospective participants and their learning priorities. The learning series was free of charge and open to any of the local jurisdictions and territories awarded by the OD2A cooperative agreement.

3. Thompson, M. A., & Deis, M. (2004). Andragogy for adult learners in higher education. In Proceedings of the Academy of Accounting and Financial Studies (Vol. 9, No. 1, pp.

<sup>107-112).</sup> 

#### Needs Assessment

On Tuesday, October 1, 2020, Danielle Boyd at the Council of State and Territorial Epidemiologist's (CSTE) sent an email to the Center for Disease Control and Prevention's (CDC) Overdose Data to Action (OD2A) recipient contact list. In this email, an introduction to the Public Health Overdose Surveillance Learning Series was given along with an invitation to complete a nine (9) question online interest form via Qualtrics.com. The purpose of the online interest form was to gauge interest, develop content, and determine availability.

There were a total of 18 respondents. Of the 16 locally funded jurisdictions, 12 responded.

#### **OD2A Funded Local Jurisdictions**

Southwest	Midwest	Northeast	Southeast
Clark County, NV*	Harris County, TX	Allegheny County, PA	Duval County, FL
Riverside County, CA	Chicago City, IL	Philadelphia, PA	Palm Beach County, FL*
San Diego County, CA*	Cuyahoga County, OH	Baltimore County, MD	Broward County, FL
Maricopa County, AZ	Franklin County, OH*	New York City, NY	
	Hamilton County, OH		

\*No response from local jurisdiction.

Six (6) additional sites completed the interest form: Manchester, NH; Augusta, ME; Saipan, Northern Mariana Islands; Hartford, CT; Washington, DC (2).

The eighteen (18) respondents represented a team of colleagues. Their current roles are as follows:

- 8 Epidemiologists **3 Program Managers** 2 Administrators/Principal Investigators 2 Data Analysts **1 Prevention Program Lead 1 Research Specialist**
- **1** Surveillance Supervisor

The interest form included three sections: surveillance program description, training needs, and known challenges. From the responses, CSTE and contractor Allyson Kelley and Associates, PLLC (AKA) have begun to better understand OD2A grantees' needs.

#### Surveillance Program Description

Most respondents (94%) understand the bur of drug-related overdoses in their jurisdiction by obtaining data generated by their partners (i.e., hospital, medical examiner/coroner, put safety/law enforcement). Seventy-five perce (75%) of respondents independently collect from their jurisdiction for overdose surveillar

#### The top 5 data sources that respondents use include:

- 1. Emergency Department: Syndromic Surveillance (16)
- 2. Death Records (i.e., Death Certificates, coroner/medical examiner reports, toxicology reports) (16)
- 3. Emergency Medical Services\*\* (14)
- 4. Law Enforcement/Public Safety (12)
- 5. Prescription Drug Monitoring Programs (10)

\*\*One respondent noted that Emergency Medical Services data is used but lags by two years.

Additional data sources that respondents use are Hospital Discharge (7), Poison Control (7), Harm Reduction (6), Jail/Prison Records (5), Public Health Laboratory (i.e., analysis of laboratory specimens) (4), Medicated-Assisted Treatment Services (3), Health Information Exchange (2), Insurance Claims (2), Interviews (1), Private Lab (1). These data are essential to local jurisdictions and are used primarily for educational programs, linkages to care programs/services, and public health policy.

#### **Training Needs**

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The majority of respondents (83%) prefer a 90-minute monthly learning lesson. Respondents identified the training topics that would be of most interest to their team as Data Analysis Methods (16), Data Dissemination Methods (15), Data Linkage Methods (12), and Syndromic Surveillance Strategies (11). Specific responses include:

#### **Data Analysis Methods**

•	Novel	analysis	with	death	records

- Predictive models
- Streamlined data analysis
- Best practices for data analysis
- Age-adjusted rates to compliment crude rates currently conducted
- Nontraditional data analysis methods for substance use
  - Machine learning models
  - Quantitative and qualitative methods
  - Analysis methods jurisdictions use to understand data

#### **Data Dissemination Methods**

- Best practices in dissemination
- Data dashboarding
- Best uses of data
- Types of data products shared across jurisdictions
- Effective use of media to communicate with public, schools, universities, journalists, key stakeholders, and PWUDs

#### Training Needs

#### **Data Linkage Methods**

- Linking data across various platforms
- Best software tools and algorithms

#### **Syndromic Surveillance Strategies**

- Optimizing EpiCenter data
- Knowledge about other jurisdictions and variables included in surveillance
- Best practices for analysis of data that has gaps
- Nontraditional data analysis methods for substance use
- Additional relevant data sources

#### **Additional Topics of Interest**

- Evaluation methods
- Partnership development and management strategies
- General principles of overdose mortality surveillance for analysts who do not work with overdose data
- Data sharing and data use agreements

#### **Known Challenges**

Challenges must be considered when designing the workshop for local jurisdictions. All respondents indicated some form of impact due to COVID-19. Most respondents have experienced staff reassigned to COVID-19 responsibilities (14) and external partners having limited availability for OD2A activities (11). More specific challenges for local jurisdictions when conducting overdose surveillance include barriers to data access (9), data sharing (9), data dissemination for stakeholders/partners (7), limited staff (5), and staff knowledge of data analysis methods (4).

The Public Health Online Learning Series planning team acknowledged these realtime challenges exacerbated by COVID-19. They considered all challenges and planned accordingly in the design of the series.

#### Lesson Titles and Learning Objectives

#### 00. Series Kick Off

Identify OD2A programs and locations Apply the storyboard method to describe overdose surveillance practices past, present, and future

List four major topics to be covered in the 2021 drug overdose surveillance learning series

#### 01. Principles of Mortality and **Morbidity Surveillance**

**Describe** and discuss mortality and morbidity overdose surveillance *Explain* the challenges and strengths of using overdose surveillance data sources **Discuss** use of different overdose measures

#### 02. Polysubstance Abuse Analysis and other Emerging Concerns

**Describe** perspectives of ME/C in classifying polysubstance overdoses and stimulantinvolved overdose trends *Identify* how jurisdictions are identifying polysubstance overdoses and stimulantinvolved overdoses **Describe** stimulant-involved overdose trends in jurisdictions **Discuss** best practices on how to access,

analyze, and present data related to polysubstance overdoses and stimulantinvolved overdoses



<b>03.</b> Data Visualization and
<b>Dissemination Methods</b>

Discuss data visualization concepts and explore best practices, dos and dont's, additional resources **Engage** in a data visualization demonstration using national overdose related data *Learn* visualization/dissemination methods from jurisdictions 04. Data Linkage Methods, Predictive Modeling and Machine Learning Discuss data linkage concepts and applications **Discuss** machine learning concepts Engage in a machine learning demonstration using national overdose related data **Capstone: Evaluation and Policy** Describe policies and practices informed by evaluation of OUD initiative, programs, and outreach List common challenges and innovative solutions for evaluation OD2A efforts Summarize OD2A requirements and reporting strategies open discussion

#### **Dates and Places**

Due to the impact of the COVID-19 pandemic, CSTE, CDC and AKA adjusted the learning series plan from a proposed in-person 3-day workshop to an online learning series that occurred over a several month period. The learning series was conducted virtually using Ring Central and Zoom. Sessions 0 through 2 were conducted using RingCentral, while lessons 3, 4 and the Capstone used Zoom. Additionally, CSTE used Taylor Made Productions Audiovisual (TMPAV) to assist with the coordination, breakout lessons, recordings, and overall management of the series. The Ring Central account was hosted by CSTE. The Zoom account was hosted by AKA.





# Methods

### Methods

Informed by Kirkpatrick's four-level model, the evaluation design focused on providing information on the value and impact of the OD2A learning series for participating jurisdictions, CSTE, CDC, and other stakeholders. Kirkpatrick's four-level model includes reaction, learning, behavior/transfer, and results and is widely used to analyze and evaluate results of training and educational programs.<sup>4</sup> Employing this approach, the evaluation assessed reaction through satisfaction and engagement, learning through value and knowledge gained, behavior/transfer through the use of information, and impact on participants of the CSTE learning lessons. Data sources included both qualitative and quantitative sources in order to offer participants a number of ways to share their experiences.

Planning Phase: Needs assessment conducted before workshops to document needs and make sure content addresses the needs of learners.

Design and Development Phase: Formative evaluation process throughout the project to guide decision making and make adjustments. Meetings with CDC, SME's, and jurisdictions.

Implementation and Delivery Phase: End of training, summative evaluation of the lessons, determine effectiveness and if format, content, and approach should be used again or modified.

Follow-up phase: Transfer and impact. Determine if series had an impact on learners' ability to implement the OD2A projects and use data to inform policy and action.

#### 4. Smidt, A., Balandin, S., Sigafoos, J., & Reed, V. A. (2009). The Kirkpatrick model: A useful tool for evaluating training outcomes. Journal of Intellectual and Developmental Disability, 34(3), 266-274.

#### **Data Sources**

Evaluation data sources included online lesson evaluations, weekly team debriefs, facilitator observations, and feedback solicited from participants, CDC, CSTE, and other stakeholders. Online assessments, focus groups, and key informant interviews were used to gain insights and explore value and meaning. Quantitative and qualitative data collected throughout the learning series centered on the following themes: value, impact, engagement, and recommendations. Ouantitative indicators included the number of lessons, number of attendees, duration of lessons, Likert-scale lesson feedback, and percentage of objectives met. Qualitative indicators examined in the evaluation included presence, quality, engagement, and satisfaction.

All data sources were used to answer the critical evaluation guestion: "What was the value of the public health drug overdose surveillance training series on jurisdictions, CSTE, CDC, and other stakeholders?"



### **Data Analysis Methods**

Quantitative data was analyzed using descriptive and inferential statistics to share results. Online lesson surveys were aggregated to provide a summative evaluation of lessons with the capstone reported separately. Qualitative data from the key informant interviews, weekly debriefs, focus groups, breakout lessons, and facilitator observations were analyzed and coded using conceptual content analysis methods on NVivo 12, and results were summarized for reporting. Triangulation of the quantitative and qualitative data collected was completed to compare findings and identify themes. Data was analyzed to respond to the evaluation question "What was the value of the public health drug overdose surveillance training series on jurisdictions, CSTE, CDC, and other stakeholders?"

#### Needs Assessment

Prospective participants were asked to complete a nine-question online interest form that served as a needs assessment. It included three sections: surveillance program description, training needs, and known challenges (Appendix A). The information gathered was used to inform the development of the training series. The eighteen (18) respondents represented twelve (12) public health jurisdictions. Respondents identified the following topics of interest:

- Data analysis methods
- Data dissemination methods
- Data linkage methods
- Syndromic surveillance strategies

These training topics informed the content included in each of the lessons. Additional information obtained from the interest form included the most frequently used data sources for opioid surveillance. The top five data sources participants used: 1) emergency department records, 2) death records, 3) emergency medical services, 4) law enforcement/public safety, and 5) prescription drug monitoring programs. This information shaped the development of the first lesson which emphasized providing participants with unique data sources being used across jurisdictions.

Lastly, respondents provided insights into the known challenges impacting their current work. This included COVID-19 impacts such as job reassignment and limited availability for OD2A activities. Specific local jurisdictional challenges included: barriers to data access, data sharing, data dissemination for stakeholders and partners, limited staff, and staff knowledge of data analysis methods. These challenges were taken into consideration and addressed in the content development of the lessons.

### Learning Sessions 1 – 4 Results

The learning lessons were attended virtually by participants representing ten (10) public health jurisdictions (AZ, CA, FL, MD, NV, OH, PA, PR, TX, and Northern Marianas Islands) with an average of three (3) participants from each jurisdiction. Attendance varied by lesson, but recordings were provided for registrants to view on their own time. The most well-attended session was Lesson 1 and the least attended was Lesson 4.

- 1. Non-Traditional Data Sources and Data **Analysis Methods for Opioid Surveillance:** 43 participants
- 2. Data Dissemination Methods: 34 participants
- 3. Data Linkage Methods and Syndromic Surveillance Strategies: 32 participants
- 4. Emerging Topics: 30 participants

Participants were asked to complete an online evaluation following each lesson. A total of 38 evaluations were completed across the first four learning lessons. The evaluation asked participants to provide information on their satisfaction with specific aspects of the lessons, the ability to accomplish the defined objectives, and the effectiveness of the lesson plan.

Individual lesson evaluation results were explored after each learning lesson by stakeholders and the information was used to improve subsequent lessons. For the purposes of this report, Lessons 1 – 4 were aggregated and analyzed to provide a summative evaluation of participant satisfaction of specific aspects of the learning series (Figure 1).

Participants were asked for their feedback on lesson engagement/collaboration, the relevance of subject matter, and usefulness and delivery of information. All respondents agreed or strongly agreed that the presentations and discussions were relevant to their public health practice. The majority of respondents also identified that trainings were useful, objectives were clearly communicated, and the trainings adhered to the scheduled agenda. Additionally, respondents strongly felt the trainings were well organized and the length of each training was appropriate. The lowest level of agreement was for the statement, "Attendance fostered relationships for future collaborative work," with 66% of respondents strongly agreeing. During Session 3, one respondent expressed that the training was too short. A few respondents in Session 4 provided similar feedback, sharing that they would have appreciated additional time to explore the information and examples on each slide before the lesson ended.

### **Learning Sessions 1 – 4 Results**

Examining engagement, respondents expressed a lower level of agreement that their attendance fostered relationships for future collaborative work with peers. Agreement was calculated based on the frequency of responses less than Strongly Agree (n = 13).

Across all lessons, participants were asked about the lesson's ability to meet the key learning objectives (Figure 2). Respondents expressed that the majority of lessons did a good or excellent job meeting the specific learning objectives.

Lastly, respondents provided insights into the effectiveness of the parts of the lessons. The majority of respondents shared that the lessons were very or extremely effective in the information shared for each part of the lesson plans. Session 4, Emerging Topics, had the highest ratings of effectiveness in the introduction to data linkage, machine learning, and in the demonstrations shared in the lesson.

Open-ended evaluation questions examined the value, impact, and recommendations for future lessons. Triangulation of the quantitative data with the qualitative feedback from the key informant interviews, team debriefs, and breakout observation are shared in detail in the qualitative section of this report.



#### Figure 1. Participant Satisfaction with Specific Aspects of Learning Series

#### Attendance fostered relationships for future collaborative 18% 66% 16% work with peers Presentation and discussions were relevant to participant 16% 84% public health practice Length of trainings was appropriate 3%3%21% 74% Trainings were useful 5% 13% 82% Objectives were clearly communicated 3% 79% 18% Trainings adhered to the scheduled agenda 74% 24% Trainings were well organized 3%3% 11% 84%

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Somewhat or Strongly Disagree

Strongly agree

Neither Agree nor Disagree Somewhat Agree

#### Figure 2. Participant Rating of the Sessions Ability to Accomplish Key Learning Objectives

- Describe and discuss mortality and morbidity overdose surveillance
- Explain the challenges and strengths of using overdose surveillance data sources
- Discuss use of different overdose measures
- Describe perspectives of ME/C in classifying polysubstance overdoses and stimulant-involved overdose trends
- Identify how jurisdictions are identifying
- polysubstance overdoses and stimulant-involved overdoses
- Describe stimulant-involved overdose trends in jurisdictions
- Discuss best practices on how to access, analyze, and present data related to polysubstance overdoses and stimulant-involved overdoses
- Discuss data visualization concepts and explore best practices, dos and don'ts, additional resources
- Engage in a data visualization demonstration using national overdose related data
- Learn visualization/dissemination methods from jurisdictions
- Discuss data linkage concepts and applications
- Discuss machine learning concepts
- Engage in a machine learning demonstration using national overdose related data



Average Good Excellent



The Capstone Session was the final in the Public Health Opioid Surveillance Learning Series and was attended by twenty three (23) participants.

Participant's favorite parts of the lessons were the breakout room discussions (n = 3). When asked its effectiveness, half of respondents indicated both breakout sessions were extremely effective. Additionally, half of respondents indicated Part 3: Introduction to Evaluation Concepts was very effective.

Participants plan to apply information from the capstone in their work. One participant shared, "Using the challenges that other jurisdictions are

#### Figure 4. Participant Rating of the Capstone Sessions Ability to Accomplish Key Learning Objectives



facing when implementing policy and regulation as an example to prepare our program to be able to accommodate any situation that we may encounter in the future."

One Capstone Session participant felt that it would have been helpful to have additional information about applying techniques presented in previous sessions (example: running a k-means analysis). This participant reported that some jurisdictions are interested in SAAS, others are recommending EPI Info 7 as a statistical application tool. "I, personally, am interested in SAAS as well. It would be great if there is learning series for SAAS provided next time."

#### **Qualitative Data Results**

Four central themes emerged through analysis of the quantitative data and qualitative data: 1) Value of the training for participants 2) Impact of the training 3) Participant engagement

4) Future recommendations

Triangulation of the quantitative and qualitative data was examined to explore convergence, complementarity, and divergence of the data through the following process: familiarization with data, generating initial codes based on evaluation and questions. A two-person research team coded interview transcripts, reviewed themes, and met to discuss any discrepancies in the data. The team then reviewed online survey data from Sessions 0-4 and discussed how the data supported overall evaluation questions and recommendations. This iterative and flexible process resulted in the four central themes presented here, and recommendations discussed later in this report. A substantial degree of overlap was found between the data sets, and together they inform each other for the results.

#### Value

Through the lesson evaluations and the key informant interviews, participants were asked about the value of the learning series for them individually and provided insights into their favorite part of each lesson. Participants expressed immense value in the peer to peer learning opportunities that the learning series offered. The information shared through peer

"It was helpful to hear what other people are doing it's just so cool how broad the project is, so it was helpful to hear how people are helping people in their county and specific challenges they're facing in their communities."

to peer learning was useful, applicable to their current work, and provided insights to address jurisdictional challenges. Participants acknowledged the benefits of seeing how other sites organized their data and the platforms they used, sharing that it helped generate ideas to use in their work. Additionally, participants valued the chance to learn about the challenges local jurisdictions faced in their work and the solutions to overcoming them.

Informed by the needs assessment completed at the beginning of the project, the training topics were tailored for the local jurisdictions participating in the learning series. The usefulness of the trainings shared in the lesson evaluations aligned with qualitative findings, with participants sharing that all topic areas were of interest and importance to their work.

#### Impact

Participants provided insights into how the While participants acknowledged that peer lessons had a direct influence on their work, to peer learning and sharing across local whether they intended on applying their learnings, jurisdictions were some of the most valuable and the perceived challenges that may impact parts of the learning series, participants also implementation. In lesson evaluations and expressed there were opportunities to improve through key informant interviews, participants engagement. Many participants expressed shared that they will use information to inform barriers to engage in the learning lessons, current and future work, through addressing identifying a lack of comfort with public barriers, utilizing alternate data sources, and sharing or an inability to attend the lessons live. adapting statistical processes for better analysis. Additionally, several participants expressed One participant shared that they were able that they view themselves as active listeners to help a local jurisdiction in establishing a and participate only to absorb new information. partnership to improve the ability to obtain opioid Session evaluations also found lower data. Another said that the information from satisfaction in the ability of the learning lessons data analysis methods for opioid surveillance to foster relationships for future collaborative facilitated better analysis, allowing for better data work with peers. to inform their prevention activities. Common While stakeholders expressed the intention for challenges to implementation included having the learning series to offer local jurisdictions the adequate resources (staff, skills, software), data chance to connect, feel supported, and make access (timeliness of data received and access meaningful partnerships, they also noted unique to the right data), and a lack of collaboration or challenges in networking in a virtual format. partnerships. Participants expressed that peer to peer sharing, breakout rooms, and the utilization of polls enhanced engagement.

#### Engagement

# "The learning series was a valuable learning experience, because you know it's related to the work that [local jurisdictions] are doing."

#### **Planned Follow-up Activities**

**Utilize** data analysis methods to improve opioid surveillance

**Develop** policies to standardize data collection **Utilize** non-traditional data sources **Establish** partnerships with new stakeholders

*Create* an interactive dashboard similar to those shared

#### **Perceived Implementation Challenges**

*Lack* of collaboration or partnerships from stakeholders

Issues in accessing the right data

Challenges in receiving timely data

*Lack* of software access, knowledge, and skills for use

*Staff* reassignment due to COVID-19 is ongoing

#### Qualitative data support Kirkpatrick's model and support the evaluation findings of value and impact.

# Reaction

"I'm very appreciative of the work that the team is doing I find that they really go out of their way to develop like a really professional package...that's such a strong foundation... well done."

# **Behavior**

"I feel like you know we go 110% and then to kind of like sit back and just do some reflection and, you know, hear about what else is going on. So that's really cool."

# Learning

"I learned a lot... this statistical review was super helpful, and also hearing what other people were doing was also helpful because it gave us some ideas. And then I know like we were able to help some people out who were having a hard time getting a connection with their medical examiner."

# Results

"I found like last week's presentation was really helpful because the presenter, showed the analysis of like complex machine learning models, which are usually like really difficult to explain, and he was able to explain it."



### Recommendations

As part of the learning series evaluation, participants were asked to provide recommendations to further enhance training and technical assistance provided by CSTE. Recommendations were solicited through openended questions in lesson evaluations, key informant interviews, and breakout lessons.

Questions to assess recommendations included:

- What do you recommend for future surveillance workshops facilitated by CSTE?
- What are the gaps and needs for training and technical assistance?
- Do you have recommendations for how CSTE engages and communicates information?

The following section highlights emergent themes among the participant feedback and pinpoints recommendations to better construct future workshops, enhance training and technical assistance, improve communications and use of virtual platforms, and increase overall engagement. These recommendations are key to creating tailored learning opportunities that will ultimately enhance jurisdictional work in opioid surveillance.

#### Recommendations for future opioid surveillance workshops facilitated by CSTE

#### **Data Analysis**

- Advanced biostatistics analysis training
- Software training with opioid datasets using key software: SAS, R, ArcGIS.
- More information on the application of statistical software for predictive analysis
- Provide datasets to allow participants to reproduce analysis from lessons

#### **Data Sharing**

- Provide examples of different data sources in the same jurisdiction
- Share examples of how Prescription Drug Monitoring Program (PDMPs) are utilized for surveillance component of OD2A programs among states
- Discuss and share the implementation of surveillance system at community-based organizations and harm reduction programs.

#### **Recommended logistics for future opioid** surveillance workshops facilitated by CSTE

#### **Participant Collaboration**

- Increase networking opportunities
- Facilitate peer to peer sharing and lessons learned
- Engage participants for a more interactive webinar series
- Provide information for collaboration ahead of time to facilitate discussions.

#### **Participant Logistics**

- Allow for time for Q&A
- Provide resources and specific trainings particip could choose from
- · Increase time of lessons as appropriate for cont
- Resume in-person workshops.
- Allow participants to choose specific resources trainings

#### Recommendations for future drug overdose training and technical assist

#### **Data Sharing**

- Discuss strategies to obtain timely data
- Share best practices for establishing data sharir agreements.

#### Data Analysis

- Assist with advanced analytical training
- Provide technical assistance for overdose data analysis.

#### Collaboration

- Provide time after lessons for those who want to specific questions
- Share best practices and challenges of other jurisdictions
- Utilize a variety of speakers including OD2A reciperation of the speakers.

ants	Recommendations for how CSTE engages with and communicates key information to consultant teams, stakeholders, and SMEs
ent	Logistics
ent	Provide timely review and response to content
and	Allow consultant teams to finalize content two or more
	days prior to lessons
	Be clear in expectations of consultant roles
tance	Maintain flexibility when contracting with SMEs.
	Collaboration
	Facilitate opportunities for consultant teams,
	stakeholders, SMEs, and CDC.
ants ent and tance	Recommendations for the use of technology and virtual platforms with CSTE online training lessons.
	Logistics
	Utilize a commonly used virtual platform like Zoom
	Use calendar invitations to help scheduling for
	participants
o ask	<ul> <li>Maintain consistency in presentation formats and lessons</li> </ul>
	Provide participants with content prior to each lesson
	and during each lesson.
pients,	Collaboration
	Facilitate networking opportunities for participants
	to share their work and problem solve with other
	jurisdictions
	Strongly encourage use of cameras.
	Engagement
	<ul> <li>Increase use of polls and small group breakout lessons on virtual platforms.</li> </ul>

### Limitations

Limitations to this evaluation include low response rates in lesson evaluations. Across the learning series only 27% of participants completing an online lesson evaluation and response rates varied by lesson (Session 1 - 9%, Session 2 - 38%, Session 3 - 31%, Session 4 - 37%). A mixed methods approach and multiple data sources were leveraged to provide a comprehensive evaluation of the learning series. Additionally, there is an increased likelihood of social desirability bias in the key informant interview findings as participants perceived that CSTE was completing the evaluation of the learning series, thus, impacting the perception of an objective evaluation and potentially influencing responses.

### **Future Work**

Findings from this evaluation demonstrate significant value and impact of CSTE's Public Health Drug Overdose Surveillance Training Series for Local/Territorial Jurisdictions participants, CSTE, and CDC. Value is evident in the number of participants attending each lesson, ratings and feedback provided through online evaluations, and qualitative data collected throughout the series. Participants plan to utilize data analysis methods to improve opioid surveillance, develop policies, use non-traditional data sources, establish new partnerships, and create interactive dashboards.

Although participants had different skills and surveillance capacity, most agreed the training series was relevant to their public health practice. The lesson recordings in the series and associated learning will be available on CSTE Learn (https://learn.cste.org/), CSTE's learning library in the summer of 2021. The availability of these resources will allow this training series to extend its reach beyond the 2021 cohort who participated in the virtual series.

#### Next steps may include:

- Streamlining CSTE's virtual delivery of online learning with consistent platform usage, breakout lessons, polls, and other innovative engagement methods.
- Identify additional opportunities for OD2A participants to continue their learning as a group or individually.
- Continue to support capacity and skill development activities for all levels.
- Promote an equity lens in surveillance efforts, making space for different approaches to surveillance, evaluation, prevention, and dissemination.



### **Sample Session Evaluation Instrument**

Please indicate your level of agreement with the following general statements:

	Strongly Agree	Somewhat Agree	Neither agree nor disagree	Somewhat Disagree	Strongly Disagree
The training was well organized.					
The training adhered to the scheduled agenda.					
The training objectives were clearly communicated.					
The training was useful to my work.					
The length of the training was appropriate.					
The presentation and discussions were relevant to my public health practice.					
My attendance fostered relationships for future collaborative work with peers.					

What was your favorite part of the lesson?

What was your least favorite part of the lesson?

Please rate the lesson's ability to accomplish the following objectives:

	Excellent	Good	Average	Poor	Terrible
Describe perspectives of ME/C in classifying polysubstance overdoses and stimulant-involved overdoes trends.					
Identify how jurisdictions are identifying polysubstance overdoses and stimulant-involved overdoses.					
Describe stimulant-involved overdose trends in jurisdictions					
Discuss best practices on how to access, analyze, and present data related to polysubstance overdoses and stimulant-involved overdoses.					
Part 1: Medical Examiner's Office in Cook County, IL.					
Setting the Stage Polysubstance Use and Stimulant Use Trends					
Part 3: Best Practices with Q&A (Presentations with Philadelphia, PA, and Columbus, OH)					

\*Note that each lesson included different speakers, so this information changed but Likert-response options remained similar for each lesson.

If you plan to apply the information shared today in your work, what implementation challenges do you foresee with the information that was shared today?

#### **Interest Form Invitation Email**

Hello,

You are receiving this message because you have been identified as a point of contact for your jurisdiction regarding your role in CDC's Overdose Data to Action (OD2A) activities.

We are pleased to announce that CSTE will be launching a Public Health Drug Overdose Surveillance Learning Series for Local Jurisdictions later this year. The training series will offer OD2A awardees in local and territorial jurisdictions the opportunity to learn key drug overdose surveillance topics and skills relevant to their roles. The training series will offer participants the chance to engage with their peers in other jurisdictions and increase their drug overdose surveillance capacity.

Prior to finalizing the learning content for this series, we invite one member from eligible jurisdictions to complete a short interest form to help us tailor the training series to your needs. The form will capture information about the following areas:

Jurisdiction Profile Surveillance Program Description Training Needs Known Challenges

Jurisdictions should designate one staff member to complete this form before end of day OCTOBER 15, 2020. This staff member should expect to spend about 10 minutes completing the form. Respondents are encouraged to consult with their colleagues who conduct drug overdose surveillance activities as needed. We appreciate candid responses as they will be helpful as we build a dynamic training series specifically for the interests of local and territorial jurisdictions. The data will be used in aggregate to develop the learning series and your identity will remain anonymous.

CLICK HERE TO ACCESS THE INTEREST FORM

The training series is described in the attached introduction. Please contact Danielle Boyd at dboyd@cste.org with any questions and/or concerns.