

ID: 73415696

Injury - Drug Overdose - Host Site Description

Arizona Department of Health Services

Assignment Location: Phoenix, US-AZ
Arizona Department of Health Services
Prevention/Bureau of Assessment and Evaluation

Primary Mentor: Martin Celaya, MPH, PhD
Chief, Bureau of Assessment and Evaluation
Arizona Department of Health Services

Secondary Mentor: Lubaba Tasnim, MPH
Epidemiologist 3
Arizona Department of Health Services

Work Environment

Hybrid

Assignment Description

The fellow will be placed with the Bureau of Assessment and Evaluation (BAE), Population Epidemiology and Evaluation Team (PEET). Drug overdose surveillance is housed in BAE. Opioids prevention is housed in the Office of Violence and Injury Prevention (OIVP). The fellow will work in partnership with both BAE and OIVP to support a combination of surveillance and prevention work that focuses on the timeliness, quality, and dissemination/use of data the agency is getting for substance use disorder and related topics including prescription drug trends and emerging illicit drug trends. Day to day activities will include:

- Meeting(virtually) with county and tribal partners to work through data requests, improve surveillance systems, and get feedback from the partners
- Utilize SAS and other data analysis tools to prepare and analyze opioid surveillance data
- Working with the prevention team to decide which data can help guide policy and prevention activities
- Creating/maintaining dashboards and visualizations to provide actionable insights into drug overdose data
- Work towards establishing a surveillance system that captures drug overdoses or enhance our current opioid overdose surveillance system to capture other non-opioid drugs such as stimulants

Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow

The fellow will be provided access to SAS, PowerBI, and ArcGIS to support assigned activities. They will have access to Google and Office Suite of products. They will be provided access to hospital discharge data (HDD), syndromic surveillance (ESSENCE), vital records, opioid prescriptions data, opioid dashboard tables, and all other necessary data systems necessary to complete assigned tasks.

Projects

Surveillance Activity Title: Opioid Dashboard Management and Data Quality Enhancement: SAS Support and Data Request Assistance

Surveillance Activity Description:

The fellow will work with both BAE and OIVP to maintain the opioid dashboard, resolve data quality issues, and assist with new data requests that are not displayed on the opioid dashboard. The fellow will also aid the Overdose Surveillance Epidemiologist with creating and updating SAS codes when the new surveillance system goes live.

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Surveillance Activity Objectives:

The fellow will contribute to both internal and external data requests, as well as maintenance of the public-facing opioid dashboard, through their knowledge of overdose data and data quality activities. Other possible deliverables include written summaries, data tables, and visualizations pertaining to opioids/overdose.

Surveillance Activity Impact:

The opioid dashboard and data requests allow ADHS and other agencies to have up-to-date overdose data that may be used for prevention activities, as well as securing funding for further overdose prevention projects. Written products will be used to support leadership awareness and enable timely response to external partners and stakeholders.

Surveillance System Evaluation Title: Assessing Data Quality for Non-fatal Opioid Overdoses

Surveillance System Evaluation Description:

The fellow will be working with the opioid surveillance team to explore data quality and completeness for non-fatal opioid overdoses. This would include using the Master Person Index (MPI) to link records across multiple databases to examine data quality and identify underreported overdose data. Additionally, the fellow will conduct regular assessments of non-fatal overdose data to identify, address, and resolve existing data quality issues to ensure accuracy of existing surveillance data.

Surveillance System Objectives:

The fellow will use the MPI to link multiple datasets, including those related to non-fatal opioid, to assess the completeness of key fields (such as demographics). The fellow will also identify facilities that underreport opioid overdoses using the linked datasets to provide outreach in hopes of improving data completeness.

Surveillance System Impact:

More accurate capture of information related to overdoses (e.g., demographics, social determinants of health) can be used to better characterize events, inform prevention activities, and assist partners with direction of activities implemented.

Major Project Title: Evaluation of Available Stimulant Data and Possible Uses for Surveillance

Major Project Description:

The fellow will evaluate relevant sources of stimulant overdose information to come up with recommendations for possible stimulant surveillance and aid in creating surveillance modes. This may include creation of a stimulant dashboard, surveillance briefs, writing queries for stimulant overdoses, and aiding in identifying stimulant overdose spikes.

Major Project Objectives:

The fellow will identify all available stimulant data to inform their stimulant surveillance project and produce recommendations on stimulant surveillance possibilities, as well as aid in furthering ADHS stimulant surveillance activities.

Major Project Impact:

Provide a new category of drug overdose surveillance to better understand the stimulant misuse landscape in Arizona. Given these data, ADHS and other partners can focus prevention efforts and secure funding to decrease the number of stimulant overdoses, both fatal and non-fatal. We have learned through current surveillance activities that stimulants are a substantial contributor to overdoses in Arizona, thus warranting the expansion of surveillance data collection.

ID: 73415696

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Additional Project #1 Title: Improving Data Quality and Dissemination for the Overdose Prevention Program

Project #1 Type: Major Project

Project #1 Description:

The fellow will work with the overdose prevention team to pursue new possibilities for data collection and dissemination including possible Overdose Fatality Review (OFR) case dashboards, reviewing Health Information Exchange (HIE) data for the OFR, and provide data updates at state OFR meetings. In addition, the collection of medication for opioid use disorder (MOUD) and substance use disorder (SUD) diagnoses data will be explored, as well as new data dissemination possibilities, such as geocoded naloxone data and unsuppressed county opioid dashboards.

Project #1 Objectives and Expected Deliverables:

Increase the breadth of data ADHS collects and publishes to better inform the public and partner agencies on the overdose crisis in Arizona.

Project #1 Impact:

Through increasing understanding of the overdose crisis, government and local coalitions may better identify those at risk of overdose death and focus resources to reduce the number of these deaths in Arizona.

Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)

BAE programs are often involved in state-wide non-opioid-related emergency responses (e.g., COVID-19, infant formula shortage). The fellow will be integrated into the data analysis arm of the HEOC structure and will assist with epidemiologic data analysis (as requested).

Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)

Fellow will be involved in initiating or expanding use of ESSENCE to monitor stimulant overdoses, detect overdose spikes, and identify possibilities for recognizing stimulant overdose clusters.