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

Primary Mentor: Bin Suh, Phd, RN  
Epidemiologist III  
Arizona Department of Health Services

Secondary Mentor: Martin Celaya, MPH, PhD  
Chief, Bureau of Assessment and Evaluation  
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). Opioids 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 opioid 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
- Running SAS code to monitor opioid surveillance data and to 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 help understand the opioid data

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, Tableau, 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 dashboard tables, and all other necessary data systems necessary to complete assigned tasks.

Projects

Surveillance Activity Title: Standardize Periodic Reporting of Opioid Overdoses

Surveillance Activity Description:
The fellow will work with both BAE and OIVP to understand the number and types of requests for information from various internal and external partners. The fellow will also work with various ADHS Offices to understand and document allowable reporting and data sharing guidelines.
Injury-Drug Overdose - Host Site Description
Arizona Department of Health Services

Surveillance Activity Objectives:
The fellow will contribute to periodic reports, providing updates by leveraging a complete understanding of the ADHS opioid dashboard, and/or assisting leadership with ad hoc internal and external requests for information. Other expected deliverables include a mix of written summary, data tables, and visualizations.

Surveillance Activity Impact:
Periodic surveillance products will be used to inform prevention interventions during program development and to improve prevention activities throughout implementation. Products will be used to support leadership awareness and enable timely response to external partners and stakeholders.

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

Surveillance System Evaluation Description:
The fellow will be working with the opioid surveillance team to explore options to improve the data quality for non-fatal opioid overdoses including using the potential use of HIE, syndromic surveillance, SUDORS, and HDD.

Surveillance System Objectives:
The fellow will need to identify the types of data that are in these systems, how to match the cases, and then work with the MEDSIS team to batch these data fields back into MEDSIS to improve the data quality.

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

Major Project Title: Evaluation of External Data Linkages to Improve Ascertainment of Overdose Details

Major Project Description:
The fellow will evaluate relevant sources of drug overdose information and link data (by case or geospatial location) that captures nonfatal drug overdoses treated by a) first responders or hospitals and/or b) criminal justice data, prescription history, or social determinants of health.

Major Project Objectives:
The fellow will develop at least one topic-specific analysis to inform and contextualize emerging relationships related to specific target populations of interest (e.g., homeless, recently incarcerated, history of mental health, low SES, urban/rural).

Major Project Impact:
Provide a more richly detailed picture of overdoses and allow the state health department and other partners to better understand and respond to key events that occur before, during or after a drug overdose. Additionally, a better understanding of how trends in overdoses vary across groups at disproportionate overdose risk will inform interventions as use of substances evolves.

Additional Project #1 Title: Public Safety Partnerships/Interventions
Project #1 Type: Surveillance Activity

Project #1 Description:
The fellow will work with the public safety organizations around the state to develop partnerships or collaboratives.
Project #1 Objectives and Expected Deliverables:
Improve data sharing and use at the intersection of public health and public safety, and explore how public safety is currently collecting data around illicit drug seizures and other activities to see how this data can be used for public health prevention activities.

Project #1 Impact:
Improved attitudes, knowledge, and capacity among public health and public safety to prevent and respond to overdoses. Increased trust between these entities will help to synchronize efforts aimed at prevention outcomes.

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 HIDTA Overdose Detection Mapping Application (ODMAP) to monitor overdoses, facilitate post-overdose outreach efforts, detect overdose spikes, locate hotspots, and/or identify emerging drug threats.

Please Describe the Fellow’s Anticipated Role in the COVID-19 Response – Include Activities and Time Allocation

None expected at this time. Arizona COVID-19 response has been indexed.

Please Describe Opportunities for Fellows to Work in Health Equity as well as Incorporating Diversity, Equity, and Inclusion into their Work

Surveillance strategies will involve collection of data around community characteristics, including race/ethnicity, and conduct analyses that consider social determinants of health and use a health equity lens. Fellow will help to document groups disproportionately affected by the overdose epidemic and those underserved by overdose prevention programs and the healthcare system.