

Behavioral Health-SAMHSA, Substance Abuse

New Mexico Department of Health, Epidemiology and Response Division

Santa Fe, New Mexico

Assignment Description

The CSTE fellow will be a full member of the New Mexico Department of Health's Substance Abuse Epidemiology Section (SAES), which is housed in the Injury and Behavioral Epidemiology Bureau. The fellow will become proficient at substance use and mental health surveillance and analysis. This includes understanding and assessing mortality, hospitalization, emergency department, emergency medical services, prescription monitoring program, and health survey data sets. The fellow will develop an understanding of substance use and mental health case definitions. The SAES is a team of seven epidemiologists dedicated to substance use prevention and surveillance. The fellow will also work closely other members of the Injury and Behavioral Epidemiology Bureau, including the mental health epidemiologist and the prescription drug overdose prevention team. The Fellow will also work closely with other substance use programs in the Department, for example the Harm Reduction Program and the Health Promotion Staff. The Fellow will assist with, and eventually lead, substance use activities. Previous examples include using Arc GIS to assess alcohol outlet density, developing a chronic pain survey, evaluating syndromic surveillance data for suicidal attempts, and assessing suicidal ideation and substance use among middle school students (grades 6-8). The fellow will also disseminate substance use and mental health surveillance data to a variety of audiences. This will include writing a manuscript, writing a public health report for the general public, and developing an infographic. Dissemination will also include presenting data to community members, clinicians, and other epidemiologists and the fellow will learn techniques for tailoring presentations to each of these audiences. The CSTE Fellow will have the opportunity to work closely with SAES' partners, including working closely with the Behavioral Health Services Division, which conducts substance use prevention activities around the state; county and tribal health councils, who coordinate health activities in their communities; and community coalitions, who provide public health advocacy. Lastly, the fellow will receive training on bill analysis and conduct scientific analysis of substance use and mental health-related bills proposed to the New Mexico State Legislature. These analyses are provided to the legislature in order to inform the legislative process. The CSTE Fellow have a voice at the table in decisions about the direction of substance use epidemiology and will be expected to take a leadership role in substance use analyses by the fellowship end.

Day-to-Day Activities

- Attend overdose prevention workgroup meetings, statewide epidemiology outcome workgroup meetings, and quarterly epidemiology meetings.
- Participate in overdose “wrap”, where each overdose is reviewed and followed.
- Use SAS and Stata to calculate prevalence estimates and rates of substance use and mental health indicators and conduct specialty analyses such as using multivariable regression to assess the independent association between substance use and risk factors.
- Use ArcGIS to map substance use and mental health indicators and conduct geospatial analyses.
- Develop data collection tools using EpiInfo.
- Write reports for and present data to a variety of audiences.
- Participate in epidemiology trainings required of all statewide epidemiologists.
- Participate in, including presenting at, the substance use journal club.
- Participate in bill analysis for the New Mexico State Legislature.
- Assist the SAES with fulfilling data requests for substance use and mental health data.
- Participate in epidemiology workgroups (e.g. the NMDOH transgender data workgroup).

Potential Projects

Surveillance Activity Fentanyl Surveillance

Fentanyl overdose has become a major issue for many jurisdictions in the United States. However, in New Mexico, fentanyl overdose death has not considerably increased. However, new analogs and synthetic opioids are changing constantly. In order to keep up with these changing needs, the Substance Abuse Epidemiology Section is developing new methods to provide communities with near real-time surveillance of fentanyl. The fellow will develop and maintain these systems.

Surveillance Evaluation Alcohol-related Emergency Medical System (EMS) Transports

EMS data has the potential to provide epidemiologists with rich information on alcohol-related harm at a very local community level. However, EMS data has not been regularly used for alcohol surveillance. The fellow would use the Guidelines for Surveillance Evaluation to assess EMS data and its potential as a surveillance system for alcohol-related harm.

Major Project Risk of Drug Overdose among People who are Homelessness or Recently Incarcerated

New Mexico is a CDC Enhanced State Opioid Overdose Surveillance recipient and has been collecting overdose mortality information using the National Violent Death Reporting System (NVDRS) for nearly a year. Community partners have expressed interest in assessing the data by populations at high risk for overdose, including people who have recently been incarcerated and people who are housing unstable. The fellow will use descriptive statistics and regression to assess the associations between these risk factors and drug overdose.

Additional Project Benzodiazepine involvement in overdose death

Benzodiazepines and opioids interact to increase a person's risk of drug overdose. However, these risks are not well documented. The fellow will receive Medical Investigator records and link mortality data to Prescription Monitoring Program data to describe benzodiazepine involvement, including diversion, in drug overdose death in New Mexico.

Preparedness Role

The fellow will participate in Incident Command Training and Emergency Preparedness trainings.

Additional Activities

Epidemiologists at the NMDOH provide scientific analysis of legislative bills. The fellow will also participate in this analysis process.

Mentors

Primary

Laura Tomedi PhD, MPH
Alcohol Epidemiologist and Substance Abuse Epidemiology Section Head

Secondary

Luigi Garcia Saavedra MPH
Substance Use Epidemiology Supervisor