**Substance Abuse and Mental Health Services Administration**

**New Mexico Department of Health, Epidemiology and Response Division**
Santa Fe, NM

**Assignment Description**

The proposed assignment will be in the Injury and Behavioral Epidemiology Bureau, Epidemiology and Response Division, in the New Mexico Department of Health. The responsibilities of the Division are to track infectious diseases, collect, analyze and use injury and health data, train organizations in disease control, prevent and reduce the severity of injury, respond to public health emergencies and provide vital records services. The CSTE Fellow will be supported by the Substance Abuse Epidemiology Section (SAES) and the Mental Health Epidemiologist. The SAES is comprised of three epidemiologists: the Alcohol Epidemiologist (and Substance Abuse Section Head and primary mentor), the Drug Epidemiologist, and the Substance Abuse epidemiologist. The SAES assesses substance abuse data from a variety of sources, including Prescription Monitoring Program (controlled substance prescription) data, hospitalization data, emergency department data, emergency medical services data (data from first responders), and mortality data (both from the Office of Medical Investigator and death certificates). SAES staff conduct population based surveillance using these data systems, conduct studies, and disseminate results to other agencies and community members. Additionally, the SAES participates in statewide planning and oversight bodies, such as the Governor’s overdose prevention task force and scientific analysis of proposed bills during legislative session. SAES staff also frequently participate in national calls and collaborations (e.g. CSTE substance abuse subcommittees) and have actively participated in many of these collaborative projects. The Mental Health Epidemiologist, who is also within the Injury and Behavioral Epidemiology Bureau, systematically assesses mental health indicators from many of the same data sources listed above. The Mental Health Epidemiologist collaborates with community partners to identify mental health data needs in the state and provides public health recommendations regarding mental health to state and local policy makers. A prospective fellow would participate in many or all of these activities. Although four project areas are listed, the mentors will work with a fellow to ensure that they have projects that they are interested in.

**Day-to-Day Activities**

The CSTE fellow’s day-to-day activities will include planning and analytic work related to substance abuse and mental health epidemiology as well as meetings with other agencies and community groups. The fellow will have experience in planning projects, preparing a project protocol, acquiring and cleaning data, using statistical packages such as STATA or SAS to perform analytics, obtaining feedback from peers, writing up project results (as factsheets, reports, and/or manuscripts), and disseminating the results of their projects. Other activities outside of the fellow’s projects will include developing substance abuse and mental health indicators; participating in legislative bill analyses, including receiving training, during the New Mexico State Legislative Session; participating in advisory councils such as the Governor’s overdose prevention advisory council; and meeting with community groups and leaders along with other Department staff. The SAES also maintains a number of substance abuse-related maps for communities and, if interested, the fellow could participate in the SAES’s GIS activities and develop maps for mental health indicators. The fellow will also have the opportunity to work with epidemiologists outside of the Bureau. For example the fellow will have the opportunity to work with epidemiologists in the Infectious Disease Epidemiology Bureau on one or more outbreak investigations.
Potential Projects

Surveillance Evaluation

Evaluate the use of Emergency Department Data as a potential mental health surveillance system

The New Mexico Department of Health uses multiple data systems to systematically monitor mental health issues within the state (e.g. mortality and survey data). Emergency department (ED) data is a relatively new data system that the Department has begun using to monitor other conditions, such as opioid overuse. Patients with mental health disorders use the ED services related to their mental health issues, for other conditions that may be complicated by their mental health disorder, or when there are barriers to obtaining needed out-patient psychiatric care. The fellow will use the Guidelines for Evaluating Public Health Surveillance Systems to compare mental health information in the ED data system to other data sources and assess its usefulness as a surveillance system.

Surveillance Activity

Surveillance of illicit drug mortality in New Mexico

Opioids, particularly prescription opioids, are the largest contributor to overdose mortality in the state. However, deaths from methamphetamine have been steadily increasing since 2008 in NM and heroin death rates remain high. Using Office of Medical Investigator data, the fellow will use text-based analysis to assess and describe illicit overdose mortality in New Mexico. Additionally, there have been reported cases of synthetic marijuana poisoning among youth. A comprehensive description of illicit drugs is needed to better understand the public’s risk and help communities plan more targeted interventions.

Major Project

Assessing the intersection between substance abuse and mental health in New Mexico

New Mexico ranks poorly for many behavioral health outcomes. New Mexico has the highest alcohol attributable death rate in the country, the third highest drug overdose death rate in the country and the fourth highest rate of suicide in the country (CDC WONDER). Although the Department of Health regularly assesses mental health and substance abuse outcomes, little has been done to comprehensively assess people with co-occurring substance abuse and mental health disorders. The fellow will use multiple sources of data to create a report of co-occurrence of mental health disorders and substance use. This report will be used by community partners to develop and improve targeted interventions for this population.

Additional Project

Assess the impact of rural/urban designation on alcohol outlet density.

The regulation of alcohol outlet density (locations where alcohol is served to the public) to prevent alcohol-related harm is a well-evidenced public health invention and a Community Guide Recommendation (www.thecommunityguide.org/news/2009/outletdensity.html). However, much of the evidence is based on studies conducted in an urban environment. NM has the highest alcohol-related death rate in the nation and many of the state’s communities are rural or frontier. There have been few papers exploring how alcohol outlet density should be defined in these communities, for example, assessing the clustering of outlets around the borders of tribal lands and the impact on health. The fellow would have the opportunity to work with alcohol licensing data and compare it to other health data, collaborate with local groups and present this information to community groups.
**Preparedness Role**

The fellow will participate in Incident Command Training and will have the opportunity to work with the Bureau of Health Emergency Management, which oversees the state’s Emergency Preparedness activities.

**Additional Activities**

If interested, the fellow will have the opportunity to participate in the evaluation of the Bureau’s naloxone distribution activities, respond to community data requests, attend local health board meetings, and on more research-based projects and manuscripts.

**Mentors**

**Primary**
Laura Tomedi, PhD, MPH  
Substance Abuse Epidemiology Section Head/Alcohol Epidemiologist

**Secondary**
Jessica Reno, MPH  
Mental Health Epidemiologist