

Maternal and Child Health

Assignment Description

The CSTE Fellow will be spending the fellowship working in the Maternal and Child Health Epidemiology Program (MCH EPI) in Santa Fe. MCH EPI implements the NM Pregnancy Risk Assessment Monitoring System (PRAMS) survey which measures preconception, prenatal, and postnatal risk and resiliency factors. New Mexico is one of four states with supplemental funding through the CDC Foundation and the W.K. Kellogg Foundation to improve MCH surveillance and data dissemination in communities of color with the goal of lessening disparities in birth outcomes. The NM PRAMS project is focused on four counties: Bernalillo, Doña Ana, McKinley, and San Juan. NM PRAMS is partnering with community organizations in each region to pilot test innovative survey research methods. The CSTE Fellow will help evaluate this project and will collaborate with the Albuquerque Area Southwest Tribal Epidemiology Center and the Navajo Epidemiology Center to analyze the data and to develop assessment reports and fact sheets that will serve the needs of the community partners. The Fellow will spend time at the Navajo Epidemiology Center in Window Rock, AZ, working with their MCH epidemiologist to analyze vital records, surveillance data, and census information from the three states of Arizona, New Mexico, and Utah to produce community health assessment profiles for the Navajo Nation. MCH EPI has also been involved in a national initiative, the Collaborative Improvement and Innovation Network (CoIIN) to improve infant mortality rates. This project has had several offshoots, including a nascent perinatal collaborative for the state of New Mexico and a project to improve infant mortality rates among African Americans and other communities of color in New Mexico. The CSTE Fellow would be welcome to participate in the evaluation of these projects.

If the Fellow has an interest in GIS, they are encouraged to work with the New Mexico Community Data Collaborative (NMCDC) at their training center located at the North Valley Public Health Office in Albuquerque. The fellow will learn the process of acquiring data, geocoding the data, aggregating data at different geographic resolutions, mapping, publishing the interactive maps using cloudbased technology and teaching community stakeholders to use the maps for programmatic and evaluation needs. The fellow will supplement the maps with geostatistical analysis of the data in collaboration with community partners and stakeholders.

Day-to-Day Activities

On a daily basis, the Fellow will spend time in the following activities: meet with data stewards to understand the state surveillance systems, meeting with MCH program coordinators to understand the public health and early childhood intervention programs in the state, participate in conference calls with CDC PRAMS, the W. K. Kellogg Foundation, the CoIIN strategy teams, and the Navajo PRAMS workgroup, attend MCH Epi Grand Rounds monthly webinars hosted by the Maternal and Child Health Epidemiology Program/ Division of Reproductive Health/ NCCDPHP/ Centers for Disease Control and Prevention, prepare data analysis plans with mentors, statistical analysis of data, literature reviews, write data analysis results as reports or fact sheets, develop questionnaires in conjunction with stakeholders, develop databases to enter structured survey responses, enter survey data, prepare abstracts and

poster presentations for CSTE and MCH EPI conferences, conduct field work with PRAMS outreach workers.

Potential Projects

The Fellow will evaluate the New Mexico Pregnancy Risk Assessment Monitoring System for reliability and validity of measures by comparing mother's survey responses to birth certificate information and for a subset of Medicaid-enrolled women to Medicaid claims files. Nearly 60% of the childbearing population of NM is enrolled in Medicaid. Subgroup analyses will be performed by racial/ethnic group to assess the quality of the surveillance system for different populations, and make recommendations for improvement.

The Fellow will design an epidemiologic study on a MCH topic of their choice, collect the data or perform a data linkage of two or more data systems, operationalize the study measures, perform statistical analysis of the data, create tables and graphs, and write a report. Suggested topics include barriers to early entry into prenatal care, early elective deliveries, maternal alcohol and tobacco use, maternal substance abuse, interconception care, infant sleep practices, or other topics of interest to the Fellow.

Other projects include:

- Assisting the Maternal Health Program with a survey of health care professional workforce in NM. The workforce focused on would be providers (medical, nursing, ancillary) that service maternal and childcare populations and settings in NM.
- Working with the Infectious Disease Epidemiology Bureau on an infectious disease outbreak investigation of relevance to maternal and child health populations (Pertussis, Group B Strep, etc).
- Assisting to develop an Atlas of Pregnancy Risk in New Mexico.

The CSTE Fellow will prepare a publication for the DOH New Mexico Epidemiology Report on a topic related to maternal and child health. <http://nmhealth.org/ERD/HealthData/documents/NMDOH-ER-CD-Infection-20131101-EN.pdf>.

The Fellow will submit an abstract to and attend the annual CSTE conferences. The Fellow will attend the 2014 national MCH Epidemiology (MCH EPI) Conference.

Preparedness Role

The Bureau of Health Emergency Management in the Epidemiology and Response Division has agreed to guide the CSTE Fellow on emergency preparedness exercises. The fellow will participate in three trainings and/or tabletop exercises over the course of the two year assignment. In this experience, they will learn the principles of resource planning, allocation and implementation for disaster and surge response at the state and regional levels, including working directly with regional contacts on region-specific disaster and surge response planning and after-action documentation as it relates to training and exercises. The Fellow will also be involved in bioterrorism grant-writing and procurement as

opportunities arise at the state level. These emergency preparedness activities will be mentored by the CDC Public Health Advisor assigned to NM in the Bureau of Health Emergency Management.

Assignment Location: New Mexico Department of Health
Santa Fe, New Mexico

Primary Mentor: Mary Shepherd, PhD, MS
Epidemiologist

Secondary Mentor: Janis Gonzales, MD, MPH
Epidemiologist