

Maternal and Child Health

Assignment Description

This CSTE fellowship is being offered by the Maternal and Child Health Epidemiology Program (MCHEP) in the Division of Reproductive Health at CDC, but is located in the heart of the US-Mexico border region in El Paso, Texas, at the offices of the US-Mexico Border Health Commission (BHC). Dr. Jill McDonald, the primary mentor for the Fellow, is a senior MCHEP epidemiologist and Assignee to the US-Mexico border region. She is located at the BHC and has been responsible for developing MCH data and epidemiologic capacity in the border region since 2006. Administrative and technical support for the fellowship is provided by the MCHEP, the BHC, and the Texas Department of State Health Services (DSHS) Office of Border Health, where the fellow's secondary mentor, Dr. Allison Abell Banicki, is based. Dr. Banicki is an epidemiologist with cross-cutting responsibility for analyzing and describing health concerns of the entire Texas border region. She works on enhancing infectious disease surveillance and epidemiological capacity along the border as part of the Early Warning Infectious Disease Surveillance (EWIDS) project. Dr. Banicki also analyzes data for chronic diseases and maternal and child health issues of special concern to the border region, including teen pregnancy, access to health care, and breast feeding.

The border region includes 44 US counties and 80 Mexican municipalities that fall within 100 kilometers of the international boundary, and is home to about 7,500,000 US and 7,500,000 Mexican residents. MCHEP works closely with US states and Mexican and binational health institutions on activities such as the BorderMACH (Maternal And Child Health) Initiative to develop MCH infrastructure and epidemiologic data capacity across this geographically and culturally unique region. El Paso is home to a variety of organizations working in public health, including the El Paso del Norte Health Foundation, the Pan-American Health Organization Field Office, the regional headquarters of Texas DSHS Health Service Region 9&10, the El Paso CDC Quarantine Station, a regional campus of the University Of Texas School of Public Health Houston, the University of Texas at El Paso, Texas Tech University Health Sciences Center at El Paso, and the BHC. El Paso is also home to two current and one former CSTE fellows.

Day-to- Day Activities

This fellowship potentially entails a great variety of experiences that can generally be classified into two types of activities. The first involves routine and close collaboration with governmental, non-governmental and academic program partners, providers and epidemiologists in the region. The BHC guides and convenes border state representatives to address public health priorities and improve health in the region and thus provides a strategic location for MCHEP to work across political entities and health institutions and build effective and sustainable partnerships in the region.

The second activity involves immersion in local MCH-related data. There is a critical need for analysis of regional and binational MCH data and the CSTE fellow will have access to many CDC and state-based surveillance systems and surveys.

Regardless of the types of the specific activities the fellow chooses to take on, he or she will have the opportunity to shape the evolving MCH infrastructure and build capacity in the region through establishing and nurturing key partnerships and through broad-based data analysis and dissemination. In addition, the fellow will participate in monthly MCHEP team meetings with other field assignees and fellows and in regular conference calls and meetings with governmental, non-governmental and academic partners across a range of program areas.

Potential Projects:

Potential projects that the fellow may be involved in are as follows:

- Map MCH indicators to U.S. counties and Mexican municipalities in the border region, using data from a variety of sources.
- Analyze MCH data such as: geographic: across and along the border and within border states; ethnic: between Hispanic and non-Hispanic sub-populations; racial: between Native American and white sub-populations
- Analyze BRFSS and Mexican ENSANut data to describe and assess reproductive health and chronic disease-related behavior in the region.
- Use BMSCP data (binational risk factor data from one pair of sister city communities the region) to describe physical activity patterns among young mothers and identify similarities between US and Mexican communities that may suggest possible binational interventions.
- Develop a qualitative study to shed light on cesarean delivery decision-making on both sides of the border.
- Conduct a review of Port of Entry emergency medical services incident data to better understand the clinical risk profile of women who cross the US-Mexico border for emergency obstetrical services.
- Review medical records of pregnant women who obtain emergency obstetrical services in the region and work with local providers to design and conduct a follow-up study of these women.
- Work with Mexican and U.S. states to pool vital statistic records and establish timely baseline measures for shared indicators.
- Assess the availability of regional resources to describe and monitor indicators of intimate partner violence.
- Link regional birth and death records to conduct analyses of perinatal periods of risk (PPOR)
- Use border data and a variety of software packages, including no- and low-cost packages such as Epi Info, to conduct similar analyses and compare results across packages.
- Develop curriculum to improve effective use of MCH data at the community level and participate as a faculty member in a BorderMACH data use workshop.
- Evaluate the effectiveness of a BorderMACH workshop using information collected from faculty, participants and impartial observers.
- Work with binational partners to develop strategies to increase dissemination of MCH research findings bilaterally.
- Provide technical support to a local BorderMACH team as they develop and carry out a binational MCH project and analysis.
- Present results of his/her work to programs within CDC's Division of Reproductive Health and Coordinating Office for Global Health, at the MCHEP Annual Meeting, at other binational meetings, and/or in peer-reviewed journals.
- Assess potential usefulness of pooling other US and Mexican data systems records, such as maternal/infant/child mortality reviews, as binational surveillance tools in region.
- Work with sister city teams of epidemiologists and program experts to evaluate the impact of local and regional MCH programs.
- Conduct an evaluation of PRAMS (NM and TX) and MIHA (CA) as effective reproductive health surveillance systems for the border population.
- Assess birth defects surveillance in the border region.
- Conduct a qualitative study to assess the validity of standard MCH and demographic survey measures in the border population.

Preparedness Role

The fellow will be involved with conducting a survey among health departments with jurisdiction in the border area to evaluate overall MCH capacity for disasters. The fellow will also participate in Texas state trainings and exercises for emergency public health preparedness. Additionally, the fellow may be asked to deploy for a large exercise or actual disaster along the Texas-Mexico border, such as the annual Operation Lone Star exercise that provides free health services to medically underserved residents of the Rio Grande Valley or natural events such as flooding.

Assignment Location:	El Paso, Texas
Primary Mentor:	Jill McDonald, MS, PhD Senior Epidemiologist CDC/NCCDPHP
Secondary Mentor:	Allison Banicki, PhD Epidemiologist Texas DSHS