

Maternal and Child Health

This CSTE fellowship position is located in El Paso, Texas and is based in the Maternal and Child Health Epidemiology (MCH EPI) Program in the Applied Sciences Branch of the Division of Reproductive Health at the National Center for Chronic Disease Prevention and Health Promotion, CDC. MCH EPI's Border MACH (Maternal And Child Health) Initiative is developing reproductive health data capacity in the U.S.-Mexico border region; El Paso, which is centrally-located and home to the United States-Mexico Border Health Commission (USMBHC), provides support for initiative-related activities.

A challenge for the MCH EPI program is to build partnerships and capacity across the numerous health institutions with responsibility for MCH in the region and to foster a border MCH identity. We expect the day-to-day activities of the CSTE fellow to involve close contact with binational epidemiologists and MCH program directors at the state and local levels and immersion in local MCH data. A MCH EPI CSTE fellow on the border could play a vital role in shaping the program's Border MACH Initiative and developing the framework for future MCH collaboration in the region.

Potential activities for the CSTE fellow include:

- Standardize and map MCH indicators to U.S. counties and Mexican municipalities in the border region
- Analyze MCH data to identify disparities across the region and differences between border and interior state populations
- Work with sister city teams of epidemiologists and program experts to evaluate the impact of local and regional MCH programs
- Conduct analyses of recently-collected binational risk factor data from one pair of border sister cities to determine the role of migration and acculturation in healthy and unhealthy reproductive health behavior in the region
- Work with Mexican and U.S. states to pool vital statistic records and establish baseline measures for shared indicators
- 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
- Assess the validity of standard MCH and demographic survey measures in the border population
- Assist in the development of curriculum to build skills to use MCH data effectively at the community level
- Participate as a faculty member in Border MACH data skills training.
- Conduct a survey among health departments with jurisdiction in the border area to evaluate MCH capacity for disasters
- Assess the utility of binational sources of mortality review data, including maternal, child, infant and fetal mortality, to increase understanding of preventable MCH deaths in the region
- Analyze RH and chronic disease-related behavioral risk factor data collected in U.S. states in the region
- Work with binational partners to disseminate MCH research findings bilaterally

The MCH EPI program and the USMBHC have access to multiple software packages and databases to conduct these activities in data collection, analysis, program evaluation, and surveillance. The Pregnancy Risk Assessment Monitoring System (PRAMS), a U.S. state-based surveillance system of vital records and interview data that contains pregnancy and related information for women from 39 states including the border states of Texas and New Mexico, is based in the Applied Sciences Branch; California has a similar state-based surveillance system in operation with records that are available for analysis; Behavioral Risk Factor Surveillance System data for the border region have recently become available through an oversample of border communities (Border Binational Risk Factor Surveillance Project); and reproductive health survey data from the Brownsville-Matamoros Sister City Project (BMSCP), managed by the United States-Mexico Border Health Association are also available for analysis. Other important data systems include CDC's National Vital Statistics System (NVSS) and equivalent birth and death registry data systems in Mexico.

The CSTE fellow will assess data, conduct analyses and map MCH outcomes and indicators in the border region. In addition to contributing to knowledge of baseline prevalence and rates, the fellow will have the opportunity to assess variation in factors associated with MCH morbidity and well-being across the region and use the data to evaluate an existing MCH program or surveillance system. We expect the fellow to present results of his/her work to programs within CDC's Division of Reproductive Health and Coordinating Office for Global Health, in binational meetings, and in peer-reviewed journals.

Assignment Location: El Paso, Texas

Primary Mentor:	Carmen Sanchez-Vargas, MD, MPH Coordinating Office for Global Health CDC Assignee to the United States-Mexico Border Health Commission (USMBHC)
Advanced Degrees:	MD, School of Medicine, National Autonomous University of Mexico (1976) MOH, National Institute of Occupational Health, Ministry of Health, Cuba (1983) MPH, Emory University School of Public Health (1993)
Secondary Mentor:	Jill McDonald, MS, PhD Senior Epidemiologist and U.S.-Mexico Border Region Coordinator-Assignee MCH Epidemiology Team Division of Reproductive Health
Advanced Degrees:	MS, University of Washington, School of Public Health (1982) PhD, University of Washington, School of Public Health (1986)