

Maternal and Child Health

The Center for Disease Control's Maternal Child Health Epidemiology Program (MCHEP), is located in the Applied Sciences Branch (ASB), of the Division of Reproductive Health (DRH), National Centers for Chronic Disease Prevention and Health Promotion (NCCDPHP). MCHEP is interested in having a CSTE fellow participate in a variety of both state/local and activities in perinatal, maternal and child health. Potential investigation activities include, but are not limited to the following:

- Evaluate a state-based longitudinally linked data system in Massachusetts and potential replication in other states.
- Work with the Mississippi Department of Health in a community-level analysis of adverse perinatal outcomes and participate in the state's formulation of a strategic plan for reduction of disparities in high-risk communities.
- Analyze variations of fetal and infant mortality rates by geographic regions in Iowa using perinatal periods of risk (PPOR) approach.
- Assist in a meta-analysis to inform national evidence-based policies on the use of certain medications in very preterm infants.
- Participate in the analysis of national data to assess the consequences of maternal sickle cell disease and perinatal outcomes.
- Analyze the relationship between acculturation factors and adverse reproductive health outcomes in the U.S.-Mexico border region using bi-national data.
- Analyze data on children's health status, nutrition, obesity, physical activity from the Iowa Child and Family Health Survey.
- Evaluate the impact of variations in state-based reporting practices on feto-infant mortality
- Develop a toolkit for clinicians on the appropriate reporting of fetal and infant deaths.
- Assist in describing the methodology of longitudinally linked data systems in 3 states.
- Assist in the investigation of fetal mortality associated with dengue in Puerto Rico.
- Organize a student session on Maternal Child Health Epidemiology at a national conference.
- Develop a multi-state workshop on an emerging MCH topic.
- Conduct a survey of state health departments on MCH capacity for disasters

MCHEP offers a variety of opportunities to travel and work directly with CDC Maternal Child Health Epidemiologists in state health departments throughout the country. There is a unique opportunity to tailor the experience to meet the needs and interests of the fellow.

MCHEP has multiple tools to conduct these activities in data collection, analyses, program evaluation, and surveillance. CDC's ASB has several datasets to conduct analysis and includes, The Pregnancy Risk Assessment Monitoring System (PRAMS), a 39-site surveillance system of state and vital records registries that contains over 500,000 women and their pregnancy experiences. The Pregnancy to Early Life Longitudinal Data Set (PELL) is one of the few maternally-linked longitudinal databases in the country created to utilize a broad range of public health datasets to examine the impact of the

prenatal environment and experiences on postnatal child and maternal health. In the U.S. Mexico border region, reproductive health survey data from the Brownsville-Matamoros Sister City Project (BMSCP), managed by the United States-Mexico Border Health Association is available for analysis. The fellow would evaluate at least one existing surveillance system listed above using evaluation guidelines developed by the CDC (2002).

Other accessible data systems include the National Vital Statistics System (NVSS), housed in the National Center for Health Statistics, and the Health Care Utilization Project (HCUP), housed in the Agency for Healthcare Research and Quality (AHRQ). The fellow would conduct research using these, and many other state datasets, to assess factors influencing the incidence of maternal morbidity, fetal/infant deaths, infant morbidity, and evaluate MCH programs using these population-based resources. There are ample opportunities to participate in outbreak investigations within the Division of Reproductive Health or with other Centers at CDC. The fellow will be able to work with the Director of the CDC-Division of Reproductive Health's Emergency Preparedness Workgroup to improve disaster and bioterrorism surveillance among the special population of pregnant women, infants, and children. Atlanta also offers opportunity for collaboration with academic institutions such as Emory University. Close mentorship will be provided by both supervisors who are Epidemic Intelligence Service (EIS) alumni with experience in mentoring CSTE fellows, post-doctoral fellows, MPH, medical, and nursing students; including experience in training MCH leaders in state and international health agencies. The fellow will present their work to state partners, the CDC Division of Reproductive Health, and in national meetings, and peer-reviewed journals.

Assignment Location:	Atlanta, GA (with travel involved)
Primary Mentor:	Wanda Barfield, MD, MPH Senior Scientist Centers for Disease Control and Prevention Division of Reproductive Health, Applied Sciences Branch
Advanced Degrees:	MD, Harvard (1990) MPH, Harvard (1989)
Secondary Mentor:	Juan Acuna, MD Maternal and Child Health Epidemiology Program Team Leader Centers for Disease Control and Prevention Division of Reproductive Health, Applied Sciences Branch
Advanced Degrees:	MD, Pontificia Universidad Javerianna-Bogota, Colombia (1981)

MCH_Atlanta CDC

Masters in Clinical Epidemiology, Universidad
Javeriana, Bogota, Colombia (1997)