

Maternal and Child Health

Description:

The MCH Epi Team

- operates and analyzes the Pregnancy Risk Assessment Monitoring System (PRAMS);
- provides epidemiologic support and consultations to WIC program, other key MCH programs through Bureaus of Genetics and Healthy Childhood and Special Health Care Needs, MCH Block Grant Application, MCH Needs Assessment, and MCH requests as needed at both section and division levels;
- conducts special studies on MCH prioritized issues in Missouri

The fellow will be involved in multiple projects mainly focused on MCH epidemiology conducted by the MCH Epi Team or through collaborations with other teams with EPHP or other sections at DHSS. The fellow will:

- learn about the structure and function of the DHSS;
- increase skills in applied MCH epidemiology and data analysis through gaining on-the-job training and experience, and attending trainings and EPI Grand Rounds offered by DHSS and CDC;
- learn MCH program activities and provide epidemiologic data, interpretation, and recommendations for program planning, implementation, and evaluation;
- learn about major MCH related data systems and gain experience in evaluating a surveillance system;
- have opportunities to analyze various surveillance data systems to inform MCH programs;
- have the opportunity to conduct cross-cutting projects with multidisciplinary teams with DHSS, and external partners from other public health agencies and academic institutions; and
- have the opportunity to disseminate the work to various audiences through presenting to program meetings, stakeholder meetings, and national meetings, and writing DHSS reports and peer-reviewed articles

Day-to-Day Activities:

The fellow's day-to-day activities may include but are not limited to the followings:

- Work with MCH programs to learn MCH priority issues from the program perspective.
- Use appropriate epidemiologic and statistical methods to manage and analyze critical surveillance systems (e.g., PRAMS, vital statistics, WIC) to determine burden, trends and patterns of MCH outcomes and risk factors, identify high-risk populations and emerging MCH issues, and communicate with programs regarding priorities to be addressed.
- Provide epidemiologic support and consultation in MCH program planning, implementation, and evaluation, other MCH requests, and investigation of events requiring emergency response as needed at both section and division levels.
- Work closely with Bureau of Health Informatics to provide epidemiologic and data support in MCH Block Grant application and needs assessment.
- Assist in writing PRAMS annual reports and fact sheets, other MCH related reports, and grant applications as needed.

- Seek opportunities to write manuscripts for publication in peer-reviewed journals and present work to various groups through DHSS meetings, external stakeholder meetings, and professional conferences.
- Attend trainings in data analysis software (i.e., ArcView, ACCESS, etc.) and human resource related topics through DHSS, DHSS and CDC EPI Grand Rounds, and CDC yearlong course.

Potential Projects:

Potential projects include, but are not limited to the followings:

- Evaluate Missouri Birth Defect Surveillance System.
- Perform perinatal periods of risk assessment (PPOR) of racial/ethnic and geographic disparities in fetal and infant mortality.
- Learn and participate in MCH Block Grant Application.
- Learn design and operation of PRAMS and conduct PRAMS analyses on issues regarding maternal attitudes and experiences around pregnancy.
- Design and implement the Toddler Health Survey, which is a PRAMS follow-up survey about maternal postpartum health status as well as toddler health, growth and development.
- Utilize WIC program data to look at inter-conception-related issues and longitudinal health outcomes in children.
- Conduct analyses by using the unique Missouri Maternally Linked Data to address various MCH issues in a longitudinal way such as maternal obesity, C-Section, preterm delivery, fetal death, and maternal and infant morbidity.
- Utilize National Survey of Children's Health and/or National Survey of Children with Special Health Care Needs to assess oral health care and characteristics of children with special health care needs to inform program development.
- Collaborate with the Bureau of HIV/STD and Hepatitis to conduct analyses using the Missouri data of the Partner Study, which was conducted in conjunction with the National HIV Behavioral Surveillance (NHBS) System. The study aimed to assess risk behaviors of male sex partners of minority women, and extent to which minority women's perceptions of their male sex partners' risky behaviors match the partners reported behaviors.
- Determine the characteristics associated with self-harm with outcomes ranging from ER visits due to cutting/piercing behaviors to completed suicides among children and adolescents in Missouri. Data sources could include the patient abstract data system, the ESSENCE system of ER visits, and the Missouri State Trauma Outcome Registry Management (MOSTORM). The CSTE fellow may also be instrumental in helping Missouri develop its National Violent Death Reporting System (NVDRS) application or implementation of funded project.

Emergency Preparedness Role:

Emergency response functions are integrated into each DHSS employee's job duties. Like DHSS employees, the fellow will complete a DHSS skill set inventory survey to prepare for a potential reassignment as needed for an emergency situation should one arise.

Assignment Location:	Jefferson City, Missouri
Primary Mentor:	Mei Lin, MD, MPH, MSc CDC Maternal Child Health Epidemiology Assignee for Missouri Missouri Department of Health and Senior Services
Secondary Mentor:	Venkata Garikapaty, PhD, MPH Lead MCH Epidemiologist Missouri Department of Health and Senior Services