

Maternal and Child Health

Assignment Description:

The Iowa Department of Public Health's (IDPH) maternal and child health epidemiologist and the research analyst are jointly located in the Division of Health Promotion and Chronic Disease Prevention/Bureaus of Family Health and Nutrition and Health Promotion. These Bureaus address a broad spectrum of maternal and child health issues and chronic disease issues of which the Fellow would play an integral part. Each Bureau has accessible and rich data sets for data analysis, evaluation, or surveillance projects. The relatively small size of the IDPH allows the Fellow many opportunities to participate in intra-bureau and inter-bureau activities including communicable disease investigation and environmental health. The fellow may also have the opportunity to serve as an adjunct faculty member at one of Iowa's colleges or universities.

Day-to-Day Activities:

This fellowship entails a variety of research, surveillance, and evaluation opportunities. These activities will involve close collaboration with governmental entities at the federal, state, and local level, non-profits organizations, and academic institutions. While the Bureaus have numerous data sets, we have limited capacity to conduct data analyses, research, surveillance, and evaluation opportunities. The fellow can take a leadership role in carrying out these activities based on his/her interests, fellowship competency requirements, and agency needs. While at the IDPH, the fellow will be immersed in these activities and work side-by-side with program and epidemiologist staff.

Potential Projects:

Examples of analytic and surveillance projects:

- Analyze data from the Iowa Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based surveillance project of the Centers for Disease Control and Prevention (CDC) and IDPH. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy.
- Link PRAMS data to the Iowa Prenatal Care Survey data to explore topics such as prenatal depressive symptoms compared to post-partum depressive symptoms, breastfeeding initiation in the hospital and continued breastfeeding, breastfeeding workplace policies and breastfeeding duration, and problems obtaining prenatal care and having experienced discrimination during pregnancy.
- Develop a Periods of Perinatal Risk (PPOR) analysis and approach to examine and monitor fetoinfant mortality with an emphasis on addressing racial disparities for infant mortality in Iowa. The PPOR approach includes engagement of community partners, mapping fetoinfant mortality, examining opportunity gaps, and developing further investigations and prevention efforts.
- Participate in a project to link birth certificates to hospital discharge data. This linked data set will provide a population based longitudinal data source to examine both maternal and newborn health outcomes.
- Conduct analyses using the linked birth certificate-hospital discharge data. Topics may include but are not limited to: pregnancy associated injuries, effect of late pre-term delivery on infant

and maternal health, effect of gestational diabetes on infant and maternal health, and maternal and newborn morbidity associated with method of delivery.

- Examine dental care access among children who obtain dental screening through Title V child health agencies and the Iowa I-Smile program. This analysis would include linking Medicaid claims data to service and program data.

Program Evaluation

- Evaluate the Community Transformation Grant. This ongoing CDC-funded 5-year project includes ongoing data collection from communities across the state, including the assessment of the built environment as well as surveys of the food environment. Topics include but are not limited to surveillance of physical activity and nutrition patterns, impact of various community initiatives on resident nutritional status, and the impact of community-level changes on behaviors, as well as project sustainability.
- Build on the existing BMI measurement project, evaluate the feasibility of creating an ongoing BMI surveillance project of school-aged children across the state, including exploring funding project options, collaborating with school nurses, and exploring viable strategies to share data at the community level to promote data to action activities.

Preparedness Role

Within the IDPH, the division of Acute Disease Prevention and Emergency Response provides support, technical assistance and consultation to local public health agencies, hospitals, emergency medical service programs, and local health care providers regarding infectious diseases, disease prevention and control, injury prevention and control and public health and healthcare emergency preparedness and response. The Fellow's primary mentor would facilitate the Fellow's participation in emergency preparedness activities as directed by the Fellow's interests and learning needs.

Assignment Location:	Des Moines, IA
Primary Mentor:	Debra Kane, PhD, MSN MCH Epidemiologist/ CDC Assignee Iowa Department of Public Health
Secondary Mentor:	Catherine Lillehoj, PhD Research Analyst Iowa Department of Public Health