

Maternal and Child Health, Maternal and Child Health

Nebraska Department of Health and Human Services, Division of Public Health

Lincoln, Nebraska

Assignment Description

The fellow will organizationally be located in the Maternal and Child Health Epidemiology Office (MCH EPI, Lifespan Health Services Unit, and Community Health Section of the Division of Public Health) and will report directly to the MCH EPI Coordinator.

Secondary supervision will be provided by Dr. Tom Safranek, State Epidemiologist. Over his 27 years in the position, Dr. Safranek has fostered the development of an experienced epidemiology staff, and has the knowledge and experience base to provide EIS officers and fellows with an ideal setting to develop epidemiologic skills and advance the knowledge and practice of public health.

The Epidemiology Fellow (EF) will be protected from clerical and routine work, and will be expected to remain highly focused on specific epidemiologic projects. Because of the organizational structure of the agency, the Fellow will have ready access to personnel and data in the Lifespan Health Services Unit / Maternal and Child Health (MCH) Epidemiology Office, and also the Public Health Support Unit (including Vital Records) and Office of Epidemiology.

Day-to-Day Activities

1) Develop an understanding of and familiarity with Nebraska's MCH and other public health-related datasets and produce a dynamic database for managing and monitoring MCH data; 2) Acquire, analyze, synthesize and interpret data for Nebraska PRAMS; 3) Accumulate "best practices" from the literature to combine with data findings for effective recommendations; 4) Develop understanding of the methods and procedures while implementing MCH surveillance programs and quality improvement projects; and 5) Pursue projects of interest that build the capacity of the MCH EPI Office and the career of the fellow.

Potential Projects

Surveillance Title V MCH Block Grant Activity

The backbone of the MCH EPI Office is the Title V MCH Block Grant data and performance management. The Office is responsible for annual tracking and reporting as well as a comprehensive five-year needs assessment. We are seeking assistance in the development of a database that will manage the data needed to perform the needs assessment, this includes five years of data on indicators from 20+ data sources broken into sub-populations, as well as national estimates for comparison.

Surveillance Evaluation of Nebraska's NESIIS System Evaluation

Evaluation of Nebraska's Immunization Registry Surveillance System Evaluation of the Nebraska State Immunization Information System (NESIIS). NESIIS is a statewide vaccination registry for both public and private providers, and tracks immunization information for both children and adults. Vaccine information in NESIIS is collected in a variety of ways and is used to determine disease surveillance, immunization coverage rates, and to inform strategic planning and program outreach in the Vaccine for Children and Immunization programs. The fellow would have the opportunity to evaluate the NESIIS system using CDC's Updated Guidelines for Evaluating Public Health Surveillance Systems. The Fellow will 1) engage with stakeholders to participate in the evaluation, 2) describe the surveillance system, 3) design the evaluation, and 4) gather credible evidence of the surveillance system including the data quality, simplicity, representativeness, and timeliness. The Fellow will write a report summarizing the findings of the evaluation.

Major Project Child and Maternal Death Review Team

An additional opportunity is the Child and Maternal Death Review Team, which captures information about deaths of children ages 0 to 17 years and of women within a year of a pregnancy. Despite a strong and committed multidisciplinary team that performs comprehensive reviews of every eligible death in the state, limited staffing and no dedicated funding has left the CMDRT in a perpetual struggle to produce timely results

(http://dhhs.ne.gov/publichealth/Pages/lifespanhealth_cdrteam_reports.aspx). Maternal death review was added as a statutory responsibility in 2014. The current process involves a three-tiered approach to identifying maternal deaths – the pregnancy checkbox and pregnancy-related causes of death on death certificates; and linking deaths of women to a recent live birth or fetal death. Subsequently, the Nebraska Medical Association performs reviews of medically-related deaths. This process is greatly in need of improvement. There are many new resources available from the CDC Foundation which we hope to begin incorporating within the next year. Our recent participation in a CDC-Harvard evaluation collaborative has provided new impetus to streamline and improve both

child and maternal death operations, and to begin making more sophisticated use of the wealth of data collected. There are many different entry points for an interested Fellow to join this process.

Additional Medicaid Data Linkage Project

The office produces an annual linkage of Medicaid enrollment data with birth certificate files to assess Medicaid coverage of prenatal care and infant outcomes. We are in our second year of expanding this linkage project to include claims data. Having a Fellow assist with or guide this process would greatly expand our, and possibly his/her, ability to work with these complicated data.

Additional PRAMS Project

Pregnancy Risk Assessment Monitoring System (PRAMS) captures information on pregnant/post-partum women and newborns. We are particularly pleased with the success of the PRAMS project, which is now in its 17th year of data collection. To date, NE PRAMS has produced trend reports and fact sheets on topics of special interest (http://dhhs.ne.gov/publichealth/Pages/prams_reports.aspx). We are seeking assistance in the development of a trend book which would include a template and or a protocol for future trend reports.

Preparedness Role

The Fellow will be expected to respond to acute and emergent problems related to infectious disease epidemiology, including emergency response activities related to naturally occurring and intentional events which have actual or potential impact on infectious disease morbidity/mortality. Nebraska's Bioterrorism Preparedness Program offers training and exercises to ensure Nebraska's preparedness in the event of an incident or attack involving biological, chemical, radiological or other agents of bioterrorism. The Fellow can access this training and participate in such exercises.

Additional Activities

The EF will have the opportunity to engage, as desired, in other programs and activities:

- The DHHS Vital Records Unit is designing a quality improvement plan for the Birth Defect Registry, and would be appreciative of additional expertise.
- Producing a profile of WIC and/or Medicaid clients and outcomes by linking PRAMS and birth certificate respondents to the WIC and/or Medicaid databases, with a secondary goal of validating WIC/Medicaid participation reported on PRAMS questionnaires and on Nebraska birth certificates.
- Continuation of two previous, now outdated, projects on perinatal regionalization in Nebraska. The goal is to understand how/whether perinatal regionalization is working in the state and what improvements should and can be made.

Many other projects are both conceivable and feasible, based on the actual interests and skills of the EF. As previously mentioned, several potential projects would involve the acquisition of new skills for the EF as well as for current staff.

Mentors

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| Primary | Caitlin Pedati MD, MPH, FAAP
Medical Epidemiologist |
| Secondary | Tom Safranek MD
Nebraska State Epidemiologist |