

Maternal and Child Health

The Pennsylvania Department of Health's (PADOH, Department), Bureau of Epidemiology (BOE) is seeking an epidemiology fellow to undertake projects that address health conditions of mothers and children in the state. This position will take advantage of the many data sources available to fully describe maternal and child health (MCH) conditions of these vital subpopulations.

The Bureau of Epidemiology (BOE) directs multi-faceted public health surveillance and assessment programs in infectious and non-infectious disease categories. Within the Bureau, the Division of Community Epidemiology supports activities for the Bureaus of Chronic Diseases and Injury, Family Health, Emergency Medical Services, and Drug and Alcohol Programs. These require data-driven decision-making that enhances the department's ability to better a) define the disease burden in the state, b) design interventions, and c) assess outcomes. Analyses are also performed on perceived clusters of specific non-communicable diseases as well, for the purpose of identifying cause and effect relationships and providing direction on intervention strategies. Critical to these functions is the analysis of available morbidity and mortality data.

The Bureau of Family Health (BFH) is the unit within PADOH that is responsible for women, children, and adolescent health in the state. The Bureau is also the unit charged with the management of Title V Block Grant funding and programming. Programs under the Title V Block Grant generate data that are used to describe health conditions for women and children in the state. PADOH's programs offer the fellow ample opportunities in many areas of Maternal and Child Health on a daily basis. Collaboration with other state agencies like the Departments of Public Welfare, Aging, Agriculture, Environmental Protection, and Education, provides additional opportunities for the fellow.

At the population level, there is access to a number of data sets including vital statistics (mortality records and birth records), statewide cancer incidence records, and patient hospitalization records through the Pennsylvania Health Care Cost Containment Council [HC4]. The linkage of birth records with hospitalization records has been piloted as a surveillance tool for birth defects, representing another potential data set. Also the Division of Community Epidemiology is evaluating other Pennsylvania public health related databases, including Medicaid Patient Encounter and Hospitalization Records, representing another opportunity for the fellow.

The trainee will have a day-to-day role in the evaluation of the quality and utility of these data sources for public health purposes. The fellow's work will involve assessment of these data for descriptive epidemiology, including analyses of disease measures, interpretation of findings and report development. This will lead to the creation of reports that will describe the distribution and impact of conditions related to maternal child health on the state. The MCH fellow will also have the opportunity to actively participate in other activities in BOE, including outbreak investigations and bioterrorism preparedness exercises.

The Bureau of Family Health has responsibility for programs that target many diverse populations in the state. Data are collected that can be used to describe health conditions and disease impacts in defined

population groups. Some of the specific areas of analysis that can be used by a CSTE Fellow for potential projects are:

- a. Data analysis of the PRAMS survey.
- b. Evaluation and description of factors related to child deaths using the Infant Death Review Program data.
- c. Evaluation of the relationship between oral health and adverse pregnancy outcome.
- d. Description of trends and geo-spatial characteristics of low birth weight in Pennsylvania.
- e. Evaluation of available data to identify factors that contribute to continuing economic and race-specific differences in maternal mortality, low birth weight, pre-term births, pre-natal care, and access to health care.
- f. Evaluation and description of the population of Children with Special Health Care Needs.
- g. Evaluation and description of the hospitalized patients diagnosed with traumatic brain injury.
- h. Evaluation of the childhood blood lead database.

The fellow will work directly with the MCH epidemiologist, Dr. Ronald Tringali and Division Director, Dr. Gene Weinberg. The fellow will participate in all activities within the Bureau of Epidemiology. The beginning phase of a new project will require a review of the condition and surveillance literature, followed by discussions with the epidemiology consultants to the MCH Program. The types of health effects data, its availability, and the quality of these data will need to be determined in the planning process. Data collection and analyses will be an ongoing part of his/her work. The fellow will not have supervisory responsibilities. The MCH epidemiologist will serve as the primary supervisor while Dr. Gene Weinberg will serve as the secondary supervisor.

Assignment Location: Harrisburg, PA

Primary Supervisor: Ronald Tringali, PhD, MS
Maternal and Child Health Epidemiologist

Advanced Degrees: PhD, University of Pittsburgh, Epidemiology (2001)
MS (Nursing), Boston University (1977)

Secondary Supervisor: Gene Weinberg, Dr.PH, MPH

Director, Division Community Epidemiology

Advanced Degrees: Dr.PH, University of Pittsburgh (1980)

MPH, University of Pittsburgh (1975)