

Maternal and Child Health

The Pennsylvania Department of Health's (PADOH, Department), Bureau of Epidemiology is seeking an epidemiology fellow to engage in projects addressing health conditions in mothers and children in the state. This position will take advantage of the many data sources available to the Department 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 can be used to describe women and children in the state. Department of Health's programs will offer the fellow ample opportunities in many areas of Maternal and Child Health on a daily basis. The PADOH collaborates with other state agencies like the Departments of Public Welfare, Aging, Agriculture, Environmental Protection, and Education, further providing additional opportunities for the fellow to participate and be involved.

At the population level, PADOH maintains many 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 initiating a project to access other Pennsylvania public health related databases including, Medicaid Patient Encounter and Hospitalization Records which represents more opportunities for the fellow to learn.

The areas where the trainee would have his/her day-to-day role are in the evaluation, testing, and application of some of these data sources. However, the concentration of the fellow's work will be the application of the data for descriptive epidemiology. Work elements will include analyses of disease measures, interpretation of findings and report development. The fellow will develop a plan for the analyses. This will lead to the creation of reports that will describe their distribution and impact on the state. The MCH fellow will also have the opportunity to learn how to conduct an outbreak investigation and participate in bioterrorism preparedness exercises.

The Bureau of Family Health has many programs affecting a great many Pennsylvania populations. Data are collected that can be used to describe health conditions and disease impacts in target population groups. Some of the specific areas of analysis 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. Participation in the State Emergency Preparedness plan. The primary and second mentors will direct the fellow's role.

Assignment Location: Harrisburg, PA

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

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