

Pennsylvania Department of Health

The Pennsylvania Department of Health's (PADOH), Bureau of Epidemiology is in need of an epidemiology fellow to assist the department with projects addressing health conditions in mothers and children in the state. The acquisition of a Public Health Fellow in Epidemiology would enhance the ability of the department to use its many data sources to fully describe maternal and child health (MCH) conditions of this vital subpopulation.

The Bureau of Epidemiology 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. This requires data-driven decision-making that allows the department 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 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 is another 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.

At the population level, PADOH maintains many data sets such as vital statistics - mortality records and birth records, cancer incidence records, and patient hospital discharge 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 and represents another potential data set. The Division of Community Epidemiology is initiating a project to access other Pennsylvania public health related databases including, Medicaid Patient Encounter and Hospitalization Records. This project presents additional opportunities for the fellow to learn.

Programs and the environment within PADOH 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.

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 analysis. This will lead to the development of reports that will describe their distribution and impact on the state.

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.

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 are:

- a. Evaluation of PA FORE Families birth defect data monitoring, linkage to services, and follow-up.
- b. Evaluation and description of factors related to child deaths using the Infant Death Review Program data.
- c. Evaluate the relationship between oral health and adverse pregnancy outcome.
- d. Describe trends and geo-spatial characteristics of low birth weight in Pennsylvania.
- e. Evaluate available data to identify factors that contribute to continuing economic and racial differences in maternal mortality, low birth weight, pre-term births, pre-natal care, and access to health care.
- f. Evaluate and describe the population of Children with Special Health Care Needs.
- g. Participate in the State Emergency Preparedness plan. The primary and secondary 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, DrPH, MPH
Director, Division Community Epidemiology

Advanced Degrees: DrPH, University of Pittsburgh (1980)
MPH, University of Pittsburgh (1975)