

Chronic Disease/Maternal and Child Health

Assignment Description

The fellow's primary work will be in the New Jersey Department of Health, Chronic Disease Prevention and Control Services Unit (CDPC) in collaboration with the Special Child Health and Early Intervention Program. The fellow will be supported by a PhD level primary mentor and a secondary mentor with a MPH who will complete her PhD in Epidemiology in the Spring of 2014. The mentor will be provided direction and support administratively from the Manager of the Epidemiology Surveillance and Evaluation Unit and staff from both Chronic Disease and Special Child Health will be available to support the fellow.

Day-to-Day Activities

The Fellow's anticipated day-to-day activities would include work on long-term analytic projects and acute outbreak investigations (suggested projects below). Other routine activities would include:

- Fellow will work with mentors and other staff to plan projects
- Develop timelines for work
- Analyze data
- Work with staff to provide feedback to programs.

Potential Projects

There is flexibility built into the program such that the Fellow will have the option of pursuing specific projects of interest. Typical potential projects include:

Exploring the association between certain chronic conditions and birth defects and autism. - A number of metabolic conditions such as diabetes, hypertension and obesity have been linked to autism spectrum disorders, neural tube defects such as spina bifida, and heart defects but the extent of these risks still remains to be fully understood. New Jersey has two major child registries that are maintained by the Department of Health: 1) the Birth Defects Registry that has been around since 1928 and electronically maintained since 1985 and 2) the Autism Registry which has over 12,000 children under the age of 22 diagnosed with autism. In addition, the Department of Health has access to the electronic birth certificate/birth file data and hospital discharge data. All of these data systems contain information on an individual's medical condition as well as enough unique identifiers for an analyst to link the data systems and conduct comprehensive research. As part of this project, the Fellow will have the opportunity to explore linking the various data systems and conducting analysis that examines the association of maternal chronic conditions and the risk for birth defects and autism

Evaluating associations between environmental factors and healthy behaviors among New Jersey adults - The New Jersey Behavioral Risk Factor Survey (NJBRFS) is an ongoing telephone survey that is partially funded by the Centers for Disease Control and Prevention (CDC) and is administered by the New Jersey Department of Health's Center for Health Statistics. This survey is a geographical subset of the national Behavioral Risk Factor Surveillance System (BRFSS), which is currently implemented

nationwide. The NJBRFS enables the DOH to generate population based estimates from interviews of non institutionalized adults. This project will involve using NJBRFS data to evaluate relationships between various environmental factors and healthy behaviors. For example, survey data will be used to evaluate whether factors such as perceived community safety, availability of recreation facilities, and access to community sidewalks are associated with self-reported physical activity.

Describing geographical patterns in cancer screening and related outcomes among residents who receive services from the New Jersey Cancer Education and Early Detection (CEED) program - The New Jersey Cancer Education and Early Detection (NJCEED) program is part of the New Jersey Department of Health's Chronic Disease Prevention and Control Services. This program provides comprehensive services for breast, cervical, prostate, and colorectal cancer including education, outreach, early detection, case management, screening, tracking, and follow-up for lower income residents. This project will involve geocoding of program data and describing geographical patterns in cancer screening and related outcomes in order to inform program planning and evaluation. This project will involve engaging stakeholders from the State's cancer registry, which may result in additional collaborative projects.

Describing obesity related hospitalizations and emergency department visits in New Jersey - The New Jersey DOH collects uniform billing (UB) patient summaries from all general acute care hospitals in the State and this data is used by the Department's Chronic Disease Prevention and Control Services to report on hospitalizations and emergency department visits for various chronic conditions. This project would involve analyzing UB data to determine the frequency of obesity related hospitalizations and emergency department visits among New Jersey residents as well as, factors associated with these events. This project will involve working with program staff to define the scope of analysis and ensure that findings are used to inform program planning and evaluation.

Note that over the course of the fellowship, other projects may be considered depending on the Fellow's interest and program need. Applicants should be comfortable working in SAS and ArcView.

Preparedness Role

The fellow will not play a specific role in emergency preparedness but will be expected to be trained on all department policies related to preparedness.

Assignment Location: New Jersey Department of Health
Trenton, New Jersey

Primary Mentor: Nancy Scotto Rosato, PhD, MA
Research Scientist

Secondary Mentor: Melissa Santorelli, MPH
Research Scientist