

Chronic Disease

Description:

The Fellow will be placed in Surveillance, Epidemiology and Evaluation (SEE) unit within the Research Division of the Office of Policy, Planning, and Assessment (PPA) in the Tennessee Department of Health (TDH).

Day-to-Day Activities:

Depending on her/his interests and analytic skill level, and the project(s) s/he chooses to participate in, the Fellow's day-to-day activities may vary. However, the Fellow will, in general, perform the following activities under the supervisions of his/her mentors:

- Become familiar with chronic disease surveillance systems in Tennessee and understand available health data sources, such as vital data systems, state and nationwide health and risk factor surveys, and health services claims data.
- Become familiar with the ongoing projects occurring within SEE and identify the projects s/he will participate in.
- Compile SAS programs to clean data, perform descriptive and analytical statistical analysis, and output results.
- Write burden reports, fact sheets, or other forms of written communications to document health conditions and risk factors within the Tennessee population and sub-populations.
- Assess the TDH needs in the areas of chronic diseases epidemiology and surveillance, and identify and propose strategies for meeting these needs.
- Seek to improve existing disease surveillance systems and/or to initiate new systems.
- Write research articles or manuscripts for publication.
- Participate in other activities within SEE.
- Work interactively and effectively with SEE and PPA staff.

Potential Projects:

The Fellow has the option to participate in one or more the following areas of study:

- Chronic disease burden assessment project: In the past several years SEE has published several burden reports on individual chronic diseases and risk factors such as diabetes, heart disease and stroke, asthma, and tobacco use. We are in the conception of a comprehensive health status report on Tennesseans which will cover all major chronic diseases and risk factors. The Fellow will have the opportunity to lead this project under close supervision of the proposed primary mentor, Dr. Yinmei Li and secondary mentor Dr. David Law. S/he will analyze data, interpret the statistics derived from analyses, make GIS maps, and compile the report.

- Spatial analysis of mortality and morbidity: We had done some pilot analyses using SaTScan™ to examine the spatial distribution of diabetes deaths. The next step is to overlay behavioral risk and socioeconomic data with mortality data to analyze the association between behavioral and social determinates and mortality. This project can be expanded to include cardiovascular diseases, cancer and chronic lower respiratory diseases, all of which are the leading causes of death in Tennessee.
- Health of minority populations: In Tennessee about 20% populations are of minority race or ethnicity. The Fellow will compile a comprehensive report to document the health status and risk factors among minority populations.
- County health profile: The Fellow will summarize the most recently available data for each the state's fourteen TDH regions and 95 counties on residents' health conditions and risk factors, and certain socioeconomically status measures.
- Other potential research projects include the study on the association of routine physician visits and emergency department visits/hospitalizations among asthma patients using TennCare claims data; seasonal variation in asthma ED visits and hospitalizations; evaluating existing chronic disease surveillance systems, identifying gaps and needs, and proposing strategies to address these gaps/needs; other projects that the Fellow might propose.

Emergency Prep Role:

The fellow will be placed in SEE with main focus on non-infectious disease epidemiology; therefore, his/her role in emergency preparedness is limited. However, we will work with Communicable and Environmental Disease Services, a section the state epidemiologist Dr. Tim Jones directs, to provide the incoming fellow the opportunity to become familiar with the operation of emergency preparedness in Tennessee.

Assignment Location: Nashville, Tennessee

Primary Mentor: Yinmei LI, MD, PhD
Director, Surveillance, Epidemiology and Evaluation (SEE)
Tennessee Department of Health

Secondary Mentor: David Law, PhD
Director of Research
Tennessee Department of Health