

Chronic Disease

The Chronic Disease and Injury (CDI) Section of the NC Division of Public Health (DPH) is committed to providing an exceptional, well-rounded experience for a CSTE/CDC Applied Epidemiology Fellow. As a national leader in chronic disease & injury prevention and control, we have a strong history of hosting CDC Prevention Specialists, UNC-Chapel Hill students, interns, and a current Applied Epidemiology Fellow (Class V). This assignment will allow a Fellow to develop applied epidemiology competencies under the guidance of two experienced mentors (one an EIS alumna) by engaging in both narrowly-focused and cross-cutting projects in chronic disease epidemiology, with opportunities to gain experience in communicable disease, injury epidemiology, and public health preparedness.

One of the Fellow's first projects will be to evaluate a surveillance system. Possibilities are: the Child Health Assessment and Monitoring Program (CHAMP), a surveillance system of child health implemented as a call-back to the BRFSS; NC's Controlled Substances Reporting System, a prescription drug reporting system; and the NC-DETECT system of Emergency Department and EMS data, as used for acute chronic disease & injury surveillance. Choice of surveillance system will depend upon the Fellow's interests.

Other potential projects include:

1. Conducting detailed analyses of BRFSS data. The CDI Section runs the 2nd largest BRFSS in the nation (>16,000 respondents per year). Potential projects include examining county-level trends in chronic disease or injury-related indicators; trends in racial and socioeconomic disparities in chronic disease or injury-related indicators; trends and factors associated with aspirin use for prevention of cardiovascular disease.
2. Using linked CHAMP and BRFSS data to examine relationships between risk factors among adults and children in the same household.
3. Analyzing county-level diabetes prevalence, risk factors, and complications data to develop a county-level diabetes "index".
4. Conducting analyses of physical activity, nutrition, or injury data from the Youth Risk Behavior Survey and the School Health Profiles, including trend and multivariate analyses.
5. GIS projects include: identifying high risk asthma areas using GIS and climate data; building a GIS for cardiovascular disease in N.C.; analyzing Breast and Cervical Cancer Control Program data by population subgroups to identify priority areas for screening; creating maps for leading causes of injury.
6. Injury epidemiology projects include: analyzing medical examiner records on unintentional poisonings; analyzing emergency department data on traumatic brain injuries; developing child maltreatment surveillance.
7. Writing a State Burden Report on one chronic disease, risk factor, or injury topic.

8. Creating an overarching chronic disease or injury surveillance plan that lists and characterizes existing surveillance, identifies gaps, and provides recommendations.
9. Working with State Center for Health Statistics staff to analyze, interpret, and disseminate data from FITNESSGRAM, a new NC system assessing student fitness levels and body mass index.
10. Evaluating the Eat Smart, Move More Community Grant program to determine impact of these grants on community partnerships and environmental/policy changes to support physical activity and healthy eating.
11. Analyzing NC Stroke Care Collaborative data to provide a snapshot of acute stroke care across the state, or evaluating the program effectiveness in improving acute stroke care.

Mentors will work with the Fellow to choose projects that fit with the Fellow's interests, fulfill the competency areas, and provide solid broad-based experience in applied chronic disease or injury epidemiology. These projects will involve the Fellow with staff across the Section, DPH, and from other states and CDC. Projects provide opportunities to present at national conferences and submit manuscripts to peer-reviewed journals. The Fellow will present work to state advisory boards and will be mentored in handling data/technical assistance requests (e.g., from public, legislators, and media). Projects in chronic disease or injury areas not mentioned above can easily be arranged.

Formal training in outbreak investigation is available and the Fellow will engage in at least one field investigation with the Communicable Disease Branch. The Fellow will take the DPH-required public health preparedness classes and will be included in Public Health Preparedness and Disaster Epidemiology Working Group efforts. Some potential public health preparedness projects include analyzing data from post-hurricane community assessments to identify effects on acute injuries and chronic disease, and opportunities for involvement in response to emergency events like hurricanes.

Assignment Location: Raleigh, North Carolina

Primary Mentor: Sara Huston, PhD

Cardiovascular Epidemiologist

Director, NC Cardiovascular Health Data Unit

NC Department of Health and Human Services, Division of Public Health

Heart Disease and Stroke Prevention Branch

Advanced Degree: PhD, University of Pittsburgh (1993)

Secondary Mentor: Scott Proescholdbell, MPH

Injury Epidemiologist, Injury and Violence Prevention Branch

Division of Public Health, Raleigh, NC

Advanced Degree: MPH, Emory University (1996)