

Chronic Disease

The Mississippi State Department of Health's (MSDH) Bureau of Health Data and Research (BHDR), in collaboration with the Office of Preventive Health (OPH), requests a CDC/CSTE Fellow to focus upon chronic disease. The State Health Officer presides over all functions of the MSDH, including supervising the Director of Health Services, Daniel R. Bender, MHS. The BHDR and OPH are organizationally located in the Health Services section, along with Women's Health, WIC, Child and Adolescent Health, and Tobacco Policy and Prevention. The OPH houses the Bureau of Chronic Disease, including the Cardiovascular Health, Cancer Control, and Diabetes Control branches, along with the Bureau of Community and School Health.

The BHDR provides data support to maternal and child health (MCH), chronic disease, injury, and oral health programs at the state and local level. In addition, BHDR assists the other five offices in Health Services with grant development and management. BHDR consists of two divisions. The surveillance division includes the Youth Risk Behavior Surveillance Survey (YRBSS), the Pregnancy Risk Assessment and Monitoring Surveillance (PRAMS), the Youth Tobacco Survey (YTS), the Maternal Infant Mortality Surveillance System, and the Mississippi Asthma Surveillance System. The program development division includes the State Asthma Program, Closing the Gap on Infant Mortality, and the State System Development Initiative (SSDI). BHDR also coordinates the Mississippi Preventive Health and Health Services Block Grant and the MCH Block Grant.

The MSDH has not had an epidemiologist devoted to chronic disease since October 2004. However, the BHDR Director and an Operations Management Analyst Principal have fulfilled the responsibilities of a chronic disease epidemiologist since that time. Mississippi's high chronic disease prevalence rates necessitate having epidemiologists on staff to focus on the very diseases that burden our citizens and hinder our healthcare system. The BHDR recognizes this need, as does CDC and CSTE. According to CSTE's 2007 Position Statement on State-level Chronic Disease Epidemiology Capacity, a senior chronic disease epidemiologist should be sought because "1) integrating chronic disease epidemiology activities across categorical programs requires insights that can be gained only through experience, and 2) experience is often required to help write grant applications that will secure the funds needed to hire additional epidemiology staff and then to mentor the new junior staff." Should Mississippi be chosen to host a CDC/ CSTE Epidemiology Fellow, one of his/ her most important responsibilities will be to identify and apply for funding to increase the MSDH's epidemiologic capacity in chronic disease. With additional funding, the BHDR could create new staff positions for chronic disease epidemiologists, facilitating long-term improvements in the health of all Mississippians.

The fellow's anticipated day-to-day activities may include:

- Meet bi-weekly with all chronic disease program staff to discuss joint projects and provide statistical information for program guidance and to support policy development;
- Collect, edit, analyze, and report data – including identifying and acquiring new sources;

Mississippi_Chronic Disease

- Develop and conduct presentations of data analyses for internal and external partners;
- Write data reports and articles for peer-reviewed journals, update the BHDR/ Chronic Disease websites with new data analyses, and assist staff in composing press releases;
- Review anecdotal and scientific data related to chronic disease collected during the Hurricane Katrina emergency and recovery period to determine preparedness measures that should be observed in future disaster situations;
- Seek out funding opportunities to support increasing MSDH epidemiologic capacity related to chronic disease; and
- Compose and submit grant applications related to building capacity for chronic disease epidemiology in Mississippi.

BHDR employs staff with varied backgrounds including: education, business, biostatistics, epidemiology, public health, health information management, and computer training and application development. These varied perspectives enable staff to collaborate on projects and utilize one another's skills to enhance program outcomes. Interdisciplinary teams are utilized frequently in BHDR, with other MSDH programs, and external partners. Chronic disease data collection and analysis is focused on non-infectious conditions in Mississippians; therefore, outbreak field investigations are not part of the proposed assignment.

There are numerous potential data analysis projects that an epidemiology fellow could become involved in, including:

- Collaborate with the CVH program to develop and implement a survey of healthcare providers to assess adherence to clinical guidelines related to heart disease and stroke treatment;
- Assist the CVH program in the development and implementation of a survey of Mississippi businesses to determine the types of services that employers' insurance plans provide to employees, such as tobacco cessation, etc.;
- Streamline evaluation measures/ methodology and compile evaluation results for Chronic Disease Mini-Grant projects;
- Analyze data from various sources, compile results, and compose a Chronic Disease Burden Report including CVH and diabetes information;
- Assist the BHDR in updating the county chronic disease profiles annually;
- Advise chronic disease program staff in appropriate program activities based on data analyses and evaluation results;
- Provide data to and collaborate with members of these interdisciplinary teams – CVH Task Force, Diabetes Coalition, and the Mississippi Chronic Illness Coalition.
- Assist the Bureau of Chronic Disease in developing educational strategies related to emergency preparedness for those with chronic diseases, in collaboration with the Office of Emergency Preparedness.

Assignment Location:

Jackson, Mississippi

Primary Mentor:

Lei Zhang, PhD

Mississippi_Chronic Disease

Lead Biostatistician and Director, Bureau of Health
Data and Research, Mississippi State Department of
Health

Advanced Degrees: PhD, University of Mississippi (2006)

Secondary Mentor: Victor Sutton, PhD
Director of the Office of Preventive Health
Mississippi State Department of Health

Advanced Degrees: PhD, Jackson State University (2007)
MPA, Jackson State University (1994)