

Infectious Disease

Support Available: The Bureau is responsible for communicable disease surveillance and control, and HIV/AIDS, STDs, tuberculosis, immunization, bioterrorism preparedness, and environmental investigations. It has over 125 employees including six physician epidemiologists. DHEC is responsible for both public health and environmental protection, which allows exceptional collaboration between these functions. DHEC is also integrated geographically (state and local health departments belong to the same state agency), greatly facilitating outbreak investigation. Office space, computer and office/technical support are provided.

Proposed Initial Projects:

1. Analyze CDC National Healthcare Safety Network (NHSN) data on reportable surgical site infections and central line associated bloodstream infections from all SC hospitals in compliance with the Hospital Infections Disclosure Act.
2. Participate in establishing data analysis plan for NHSN data for HAI Prevention Collaboratives.
3. Analyze Healthcare Associated Infections (HAI) Prevention project data and evaluate program methods.
4. Establish data requirements for an HAI hospital discharge data set and develop procedures for systematic and routine analysis and dissemination of trend and cost data.
5. Collaborate with state partners (SC Hospital Association, SC Office of Research and Statistics, and CMS QIO) and their epidemiologists and statisticians to evaluate trends and effectiveness of HAI prevention processes.
6. Participate in assessing and validating the methodology for the new statewide Methicillin-Resistant *S. aureus* (MRSA) bloodstream infection surveillance system (links lab reports with hospital discharge data).
7. Analysis of co-morbidity associated with *Clostridium difficile*-associated disease.

Range of Opportunities: In addition, the CSTE Fellow will have numerous opportunities to participate in disease outbreak investigations and public health decision-making. DADE is responsible for reportable communicable diseases / outbreak surveillance and epidemiologic response and for state policies, coordination, consultation, and training for the public health regional staff. These responsibilities include diseases that are vaccine preventable, enteric, vector borne, bioterrorist, and acute exposures to environmental hazards. The Division analyzes syndromic surveillance systems. Other examples of specific surveillance and response programs include seasonal flu, foodborne illness, and antibiotic resistance.

The DADE team meets weekly to discuss case and outbreak investigations and monthly meetings or by conference call with the 8 Regional Epi Coordinators. Often these are joint meetings with the Public Health Preparedness Directors. The CSTE Fellow will attend these meetings and have the opportunity to present to the group and to other state or local meetings. For the past 14 years, DADE has had an annual Epi conference for the multi-disciplinary Regional Response Teams. Hospital Infection Preventionists also attend the conference. The CSTE Fellow would have the opportunity to present at the EPI Conference and to mentor Regional Epi teams as they prepare to present at the conference. The CSTE Fellow will attend the Hospital Infections Disclosure Act Advisory Committee meetings and the multi agency meetings of the SC Healthcare Alliance for Infection Prevention.

Strengths of Assignment: DHEC provides a wide range of experiences and mentoring in communicable and chronic disease, environmental and healthcare epidemiology. Integration of state and local Health Departments into one state agency provides an unusual degree of access to public health problems. Since the 1970s the agency has trained 15 EIS Officers who have consistently published in peer-reviewed journals and gone on to successful careers. Two former South Carolina EIS Officers are now employed in the agency and SC has an EIS Officer currently assigned.

University Affiliation: The University of South Carolina's Schools of Medicine and Public Health are located close to DHEC and share numerous student rotations and staff appointments. There

are ample teaching opportunities at both schools including possible adjunct faculty appointments for public health staff.

Cultural and Recreational Assets: Columbia, the state capitol, is a mid-sized city that is two hours away from the ocean and unspoiled sea-island environments, and from the Blue Ridge Mountains. Columbia offers whitewater kayaking, sailing, water skiing and fishing and a nationally recognized zoo and botanical gardens. Cultural assets include excellent schools, art cinema, theater, a symphony orchestra, ballet companies, cultural events and student life at the Univ. of South Carolina (USC), and the Spoleto festival in historic Charleston,

Opportunities for Partner's Employment: USC, state government agencies, several referral hospitals, private industry and a major military base (Ft. Jackson) offer a variety of employment.

Assignment Location: Columbia, South Carolina

Primary Mentor: James Gibson, MD, MPH
State Epidemiologist
Director, Bureau of Disease Control

Secondary Mentors: Dixie Roberts, APRN, MPH
Director, Healthcare Infections and Antibiotic Resistance Section

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