

Subject Area: Infectious Disease

Assignment Description

The Virginia Department of Health's Office of Epidemiology is responsible for a broad range of disease surveillance and control activities in Virginia. The Fellow would work mainly within the Office's Division of Disease Prevention. Responsibilities of the division include investigating or providing consultation on HIV/STD/TB disease outbreaks; developing and implementing infectious disease database and surveillance systems; developing guidelines for HIV care and prevention; and supporting statewide epidemiologic infrastructure and capacity by maintaining grants, regulations, and policies and by providing training.

The Fellow will become a member of the DDP team of epidemiologists. DDP is focused on applied public health epidemiology, and much of the assignment will involve analysis of HIV and STD data, including disease surveillance and care to determine trends and the focus of interventions. The National HIV/AIDS Strategy (NHAS) focuses on ensuring access to HIV care for those infected and ensuring that persons with the disease are given adequate resources to be diagnosed. The fellow would help analyze data within the Division to determine the effectiveness of the NHAS and in particular, interventions implemented in Virginia to increase HIV awareness, linkage to care, retention in care, and viral suppression rates.

Day-to-Day Activities

The Fellow's day-to-day activities will involve active participation as a team member within the Division of Disease Prevention (DDP). With support from VDH DDP staff, the Fellow will work on projects related to investigating, monitoring, and responding to infectious diseases of public health importance in Virginia. This may include collecting and analyzing epidemiologic data and reporting findings, working to improve surveillance systems and the use of existing systems, creating information for the public and healthcare providers and guidance for health departments, and giving presentations on public health topics. Outbreak investigations involve collecting information and designing and implementing an analytic approach to identify the source of the outbreak and developing recommendations to prevent further spread of disease. The Fellow will participate in weekly HIV/STD field staff meetings, where current outbreaks, investigations, and other issues are discussed, as well as monthly statewide webinars.

Potential Projects

The Fellow will have substantial input in determining the projects that are pursued. Activities will include work on analytic projects, outbreak investigations, and planning and policy related activities. The Fellow will select one or more long-term projects to work on during the fellowship. Examples that may be considered include: conducting an analysis of the HIV continuum of care data, including linkage, retention, and viral suppression rates over time and across different demographic and geographical groups; assessing the impact of electronic laboratory reporting on completeness and timeliness of HIV surveillance data; and assisting with the implementing of molecular HIV surveillance in Virginia, which

includes establishing a system for collecting genetic sequencing data from laboratories. In addition, DDP participates in a number of statewide and national initiatives related to improving HIV surveillance data and its utilization. Through participation in these initiatives, the Fellow would gain experience in all aspects of HIV surveillance and data analysis, including program evaluation, medical chart abstraction, entering and analyzing data, and generating reports.

The Fellow will also work on program and surveillance system evaluations. One option would be to evaluate HIV surveillance data reported from physicians and laboratories across Virginia to assess whether changes in the HIV testing technology have affected surveillance and to evaluate the HIV surveillance system according to CDC criteria of timeliness, usefulness, etc. Information learned from the evaluation will be used to frame future case investigation guidance. Another option would be to evaluate the current system for collection of HIV care data under the Ryan White funding streams to determine if the implementation of the Affordable Care Act will affect DDP's ability to collect important medical information for those living with HIV, as many Ryan White clients will now be covered by insurance. Ryan White data are currently reported from medical providers, health departments, and community-based organizations who utilize either VACRS or Ryan White CAREWare, which is software provided by the Health Resources and Services Administration (HRSA). The evaluation would focus on reviewing the usefulness, timeliness, and completeness of the data in the Ryan White system.

Opportunities will also exist for the Fellow to work on projects with other divisions within the Office of Epidemiology. Within the Division of Environmental Epidemiology (DEE) there are opportunities to work with staff on the surveillance and investigation of zoonotic diseases, including rabies and vector-borne diseases (e.g., West Nile virus). In addition, there are opportunities to work with the Division of Immunization on vaccine-preventable diseases, such as pertussis, measles, and varicella. Such opportunities will provide the Fellow with extensive practical experience and skills, a good understanding of the roles and responsibilities of state and local health departments, and access to significant projects related to the Fellow's interests and career goals.

The Fellow will acquire a range of practical public health skills and experiences useful in a wide variety of career paths. These activities may also lead to presentations, conference abstracts, and/or peer-reviewed publications. We expect that the Fellow will have the time and autonomy to develop projects of interest, while participation in the Office of Epidemiology's many activities will provide opportunities to acquire a broad range of skills and experiences.

Preparedness Role

The Office of Epidemiology plays a predominant role in emergency preparedness and response activities. Staff work closely with the VDH Office of Emergency Preparedness to conduct a wide range

of activities which the Fellow will have an opportunity to participate in, including: emergency preparedness exercises and drills, developing emergency response plans, creating educational resources and materials (e.g., fact sheets and provider guidance) for biological, chemical and radiological emergencies, and responding to public health emergencies. For example, the Fellow may work to bolster state and district plans for public health response to chemical emergencies.

Assignment Location: Virginia Department of Health
Richmond, Virginia

Primary Mentor: Kristen Kreisel, PhD
HIV Services Analyst

Secondary Mentor: Anne Rhodes, MS
Director of HIV Surveillance