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

Surveillance Evaluation

HIV Surveillance System Evaluation

Evaluate HIV surveillance data reported from physicians and laboratories across Virginia to assess whether changes in the HIV testing technology and the new case reporting definition 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.
Surveillance Evaluation

STD Surveillance System Evaluation

Assisting with an assessment of current STD surveillance system capabilities and standard operating procedures for data collection and handling. The STD surveillance unit is currently transitioning from STD*MIS to Maven as a data and case management system.

Surveillance Activity

HIV Continuum of Care Analysis

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. This would also include determining methods to estimate the undiagnosed population for those living with HIV in Virginia.

Major Project

HIV Care Analysis

Evaluation of 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 has affected DDP’s ability to collect important medical information for those living with HIV, as many Ryan White clients are now 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.

Additional Project

STD Data and Policy Analysis

Potential activities related to STD (chlamydia, gonorrhea, syphilis) surveillance include work on analytic projects involving social determinants of health and spatial distribution of disease, outbreak investigation and detection methods, and policy related initiatives. For example, the Fellow could assist with the development of outbreak detection methods for STDs in areas with very low (i.e. 0-5 cases per year), which are not amenable to standard deviation-based detection methods. Policy-based issues currently of relevance include the transition to third-party billing for clinical services in local health departments and identifying opportunities to collaborate with the private sector to promote appropriate STD screening and care. The Fellow will also have the opportunity to assist with special projects, such as the expansion of sentinel STD clinic and enhanced population-based surveillance initiatives. Associated activities could include: entering interview data and performing quality assurance; generating routine and special data reports; conducting spatial analyses of diagnoses and client catchment zones; and analyzing trends in client risk behaviors and diagnoses over time.
**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.

**Additional Activities**

The Fellow could assist with the annual targeted evaluation plan required as part of the STD Assessment, Assurance, Policy Development, and Prevention Strategies (AAPPS) grant. For the upcoming year, this evaluation focuses on the development of standardized operating procedures to guide field operations activities, including case and cluster investigations, managing the flow of information to and from disease intervention specialists (DIS), priority interviewing, and internet-based partner-services.

**Mentors**

| Primary | Anne Rhodes, PhD  
| Director of HIV Surveillance |
| Secondary | River Pugsley, PhD  
| STD Epidemiologist |