

ID: 60272032

Infectious Diseases - Host Site Description

U.S. Virgin Islands Department of Health

Assignment Location: Charlotte Amalie, CA-VI
U.S. Virgin Islands Department of Health
Epidemiology Division

Primary Mentor: Lisa Ekpo, DrPH
Deputy Territorial Epidemiologist
Virgin Islands Department of Health

Secondary Mentor: Esther Ellis, PhD
Territorial Epidemiologist
Virgin Islands Department of Health

Work Environment

100% In-person

Assignment Description

The AEF will be placed under the direct supervision of the Deputy Territorial Epidemiologist and the Territorial Epidemiologist. The major activity will be to develop a wastewater surveillance system although the AEF will be afforded ample opportunity to contribute to outbreak responses, disaster preparedness and response, and emerging public health issues. The Epidemiology Division supports a multitude of public health programs, and the AEF will be encouraged to pursue areas of interest while addressing the learning competencies. Greater than fifty percent of the AEF's time will be dedicated to wastewater surveillance and the remainder will be available for emerging outbreaks, newly identified projects, and trainings.

The Epidemiology Division at the U.S. Virgin Islands Department of Health (VIDOH) includes four major foci: Epidemiology, Health Research, Statistics & Quality Assurance, and Health Information Systems. As the focal point for outbreak management, the division works closely with the five other VIDOH divisions to assure collaboration. Currently, there are about twenty staff members in the division who are divided into two major offices on St. Thomas and St. Croix.

The Epidemiology Team on St. Thomas and St. Croix are led by Doctoral-level staff Epidemiologists supported by numerous masters-trained staff members, CDC assignees (Career Epidemiology Field Officer, Epidemic Intelligence Service Officers), and highly qualified surveillance personnel. The breadth of experience of the potential Associate's colleagues will provide a strong learning and mentoring environment.

As a host site with highly skilled, doctoral-level leadership staff, exceptionally qualified field staff from partner entities (CDC, CSTE, etc.) and current and former CDC Epidemic Intelligence Service Officers (2), the VIDOH Epi Division is a vibrant and highly effective team. That effectiveness has enabled the team to identify new opportunities to better serve our communities and address emerging public health issues. Building on those successes affords opportunities for incoming staff members, such as AEFs, to contribute to the VIDOH mission while learning and growing with a robust public health team.

Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow

While a working knowledge of statistical software, namely R, would be beneficial, Epi Division staff members are committed to providing training and mentoring as needed to assure that the AEF is can develop these skills. Similarly,

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training and mentoring are available to familiarize the incoming AEF with the National Electronic Disease Surveillance System Base System (NBS) and Beacon database, which are used by VIDOH for routine surveillance.

Projects

Surveillance Activity Title: Wastewater Surveillance

Surveillance Activity Description:

In 2023, USVI began piloting a wastewater surveillance system to facilitate early detection of emerging pathogens. Currently, USVI is testing wastewater at 5 sites across the territory for COVID, RSV, Flu A, Flu B and high consequence drugs. Based on the success of this pilot, The USVI Epidemiology Division aims to expand this program and build a sustainable system with broader representation of wastewater sites.

The AEF will conduct an initial evaluation of the existing pilot, provide recommendations, and work with partner organizations to enhance surveillance. As there are current opportunities to collaborate with public and private entities in both USVI and Puerto Rico, the AEF will be charged with scoping opportunities and working with the Epidemiology Division leadership team to achieve these outcomes.

Surveillance Activity Objectives:

- Conduct and evaluation of the existing wastewater surveillance system
- Identify gaps and areas for improvement
- Produce a surveillance system evaluation report
- Provide recommendations for implementation of findings
- Lead system development

Surveillance Activity Impact:

A sustainable wastewater surveillance system and program will facilitate the early detection and mitigation of emerging threats in USVI.

Surveillance System Evaluation Title: Lead Surveillance

Surveillance System Evaluation Description:

Under the leadership of the most recent USVI AEF, a lead surveillance system was developed and implemented in 2023. During the Fall of 2023, local and subsequent national disasters were declared in response to reports of lead in the municipal water supply on St. Croix, which notably increase efforts to bolster the burgeoning program. Ensuing Epi-Aids and Lab-Aids were conducted to test human blood lead levels and program enhancements continue.

The incoming AEF will have an opportunity to evaluate the lead surveillance system post disaster response and will provide guidance pertaining to building a sustainable and effective ongoing lead surveillance system and program.

Surveillance System Objectives:

- Conduct an evaluation of the existing lead surveillance system
- Identify gaps and areas for improvement
- Produce a surveillance system evaluation report
- Provide recommendations for implementation of findings

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Surveillance System Impact:

A sustainable lead surveillance system and program will facilitate the early detection and mitigation of lead exposures in USVI.

Major Project Title: Foodborne Outbreak Surveillance

Major Project Description:

Following the 2017 hurricanes in USVI, foodborne outbreak surveillance has remained a priority for USVI although provider education, routine testing, and response protocol are needed to codify the system development.

Major Project Objectives:

- Conduct evaluation of the existing foodborne pathogen surveillance protocol and provide a report
- Identify gaps and emerging pathogens to be incorporated into the surveillance system
- Produce an implementation plan for expanded surveillance
- Monitor system reports and provide consultation to foodborne team for interventions

Major Project Impact:

Mitigation and control of foodborne illnesses

Additional Project #1 Title: Healthcare-Associated Infections (HAI) Surveillance

Project #1 Type: Major Project

Project #1 Description:

HAI surveillance is being conducted in USVI although the system requires both evaluations and expansion.

Project #1 Objectives and Expected Deliverables:

- Conduct evaluation of the existing HAI surveillance protocol and provide a report
- Identify gaps and emerging pathogens to be incorporated into the surveillance system
- Produce an implementation plan for expanded surveillance
- Monitor system reports and provide consultation to HAI team for interventions

Project #1 Impact:

Mitigation and control of HAI

Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)

Preparations for the annual hurricane season and emerging threats require that the Epidemiology Division work closely with the VIDOH Emergency Preparedness Program and the AEF will be expected to dedicate 10% of their time to the following:

- Support Jurisdictional Risk Assessment Activities
- Respond to emerging threats/outbreaks
- Support hurricane preparedness activities
- Enhance shelter and needs assessment tools for hurricane response

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Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)

The Epidemiology Division has undergone a major period of growth and expansion over recent years stemming from strong leadership and responses to major outbreaks and disasters (Chikungunya, Zika, Hurricanes Irma/Maria, COVID-19). Moreover, less prominent cluster and outbreak investigations routinely divert Epi staff from routine functions to respond to emerging needs. The AEF will serve an integral role in outbreak investigations as they arise and will work closely with the Epi Division leadership team and Epidemic Intelligence Service Officers (EIS) during such responses.