Infectious Diseases, Injury-Drug Overdose

Maryland Department of Health, Infectious Disease Prevention and Health Services Bureau /Center for Viral Hepatitis

Baltimore, Maryland

Assignment Description

The CDC/CSTE Applied Epidemiology Fellow will be assigned to the Center for Viral Hepatitis (CVH) within the Infectious Disease Prevention and Health Services Bureau (IDPHSB). IDPHSB within the Maryland Department of Health’s Prevention and Health Promotion Administration is responsible for the statewide response to HIV, sexually transmitted infections and viral hepatitis as well as support harm reduction services and drug user health.

The primary assigned unit, CVH, is responsible for the coordination of statewide response for the elimination of viral hepatitis in Maryland. CVH collaborates with the following Partners to plan, implement and evaluate viral hepatitis response activities in the State:

- Bureaus and Centers within the Maryland Department of Health
- The local and City Health Departments
- Department of Public Safety & Correctional Services
- Academic and Research Institutions
- Federally Qualified Health Centers
- Community based organizations

CVH currently oversees multiple programs aimed at improving hepatitis B and hepatitis C screening and diagnosis, linkage-to-cure and management for persons infected and enhancing surveillance for hepatitis C infection. The major programs of CVH are:

- The Maryland Community-Based program To Test and Cure Hepatitis C (Test and Cure Program)
- The Rapid Hepatitis C Testing Program
- The Hepatitis C Testing and Linkage to Care Program
- Enhancing Hepatitis C Surveillance project

The Center also collaborates with the Center for Harm Reduction Services to implement interventions aimed at primary and secondary prevention of viral hepatitis among persons who inject drugs. The Fellow will report directly to the Chief of the Center for Viral Hepatitis. He/She will also meet regularly with the Epidemiologists and program officers in viral hepatitis, HIV Surveillance, and STI prevention programs to discuss hepatitis C surveillance related issues. The prospective Fellow will also oversee the development of the state viral hepatitis epidemiological profile.
Day-to-Day Activities

The Fellow will be assigned an office space in IDPHSB and within the lot dedicated to Epidemiologists assigned to the Bureau. The Fellow is expected to spend about 75% of time in the office providing analytical support and will also attend meetings. Key day-to-day activities shall include, but not limited to:

- Supporting clinical data (retrieval, analysis, and report) on hepatitis C treatment from Test and Cure clinical sites. These clinical sites participated in a provider training program on management of hepatitis C infection in primary care settings and are expected to submit quarterly reports to CVH.
- Conducting quality monitoring of hepatitis C linkage-to-care data in the Patient Record Information System Management (PRISM) database. PRISM is the Maryland’s data system for STI surveillance and STI/HIV field investigations and linkage to care, used to track field work and linkage-to-care outcomes for HCV treatment patients who drop out of care at HCV treatment sites and are referred to the local health department for outreach and re-engagement support and services.
- Providing regular updates to the CVH Epidemiologist on the development of the State Viral Hepatitis Epidemiological Profile. The Fellow will be involved in the data gathering and analysis for the development of the report. Data sources includes vital statistics, Maryland NEEDS, Hospital discharge records, Medicaid claims data and inmates’ health records.
- Participating in monthly IDPHSB data presentation meeting. These meetings facilitated by the Bureau’s Epidemiologists, presents novel findings on HIV, STI, viral hepatitis and drug user health programs.

Potential Projects

Surveillance Activity  Enhancing Hepatitis C Virus Surveillance

This surveillance activity will include ensuring data completeness for hepatitis C cases reported in the National Electronic Disease Surveillance System (NEDSS), supporting record search for cases, collation and analysis of cases for programmatic reporting and development of epidemiological profiles.

In collaboration with the responsible officers at the local health departments and CVH epidemiologist, the Fellow will support case identification in the PRISM database for hepatitis C cases that have no record that RNA confirmatory test has been conducted or have attended at least the first medical appointment following referral. The Fellow will be supported to develop and update a viral hepatitis C cure cascade which will inform programmatic decision and future planning.

The Fellow will also be allowed to introduce innovative methods to enhance hepatitis C surveillance, including ensuring timeliness and completeness of data.
Surveillance Evaluation

Evaluation of National Electronic Disease Surveillance System for Hepatitis C Surveillance

The Maryland NEDSS serves as the surveillance system for most infectious diseases reporting in Maryland. Communicable diseases surveillance is informed by the collection and analysis of information from providers and institutions that perform infectious disease testing. Maryland regulation requires health care providers, health care institutions, and medical laboratories to report both chronic and acute symptomatic hepatitis B virus and hepatitis C Virus infections to the local health departments. These reports are submitted electronically and paper-based to the local health departments and the department of Health

Prospective Fellow will conduct an evaluation of the National Electronic Disease Surveillance System (NEDSS) for hepatitis C surveillance and disseminate the report. Report findings will inform the necessary changes required to make the surveillance system more effective.

Major Project Development of the Maryland Viral Hepatitis Epidemiologic Profile

The State viral hepatitis epidemiologic profile will incorporate an array of routine and novel data sources to describe the burden of viral hepatitis in Maryland. The goal of the project is to provide a thorough description of viral hepatitis infections among various populations in Maryland in terms of socio-demographic, geographic, behavioral and clinical characteristics. The final document will also provide information required to conduct a needs assessment and gap analyses to inform viral hepatitis reprogramming.

The Fellow will work with two other Epidemiologists on this project. They will provide necessary support for data collection, analysis and presentation of the result. Upon completion of the project, the fellow will be involved in dissemination of the profile findings to stakeholders at local and state level.

Additional project Needs Assessment to inform hepatitis C linkage-to-cure intervention

The availability of novel, more effective directly acting antiviral agents to cure hepatitis C infections has made it more feasible to achieve viral hepatitis C elimination. However, there are numerous infected persons who are aware of their infected status but are not engaged in care or lost to follow up. There is also limited documented evidence on the burden of individuals that are not linked to hepatitis C treatment. The prospective Fellow will have an opportunity to conduct a brief assessment on hepatitis C linkage to care gap and interventions in selected local health departments. Upon completion of this study, the fellow will propose actionable recommendations which will be included in the activities to be implemented and funded in FY21.

Preparedness Role

Fellow will provide support for the Bureau's Emergency Preparedness and Rapid Response Committee.
Additional Activities

Monthly Infectious Disease Prevention and Health Service Bureau (IDPHSB) Data Presentation Meeting

Presentation/facilitation of viral hepatitis data presentation in IDPHSB data meetings and other stakeholder’s meetings

Mentors

Primary  Tolu Arowolo, MBBS, MPH, MSc (Epid)
           Chief, Center for Viral Hepatitis

Secondary  CaSaundra Bush, BS, MPH
           Epidemiologist II