Infectious Diseases

Rhode Island Department of Health, Center for HIV, Hepatitis, STDs, and TB Epidemiology
Providence, Rhode Island

Assignment Description

The Fellow will be assigned to the Center for HIV, Hepatitis, STDs, and TB Epidemiology and report to the Surveillance and Evaluation Manager. This Center is dedicated to providing surveillance and prevention support for the entire state. This Fellow will be assigned to hepatitis B and hepatitis C surveillance. The individual will oversee a team of interns and support staff assigned to enter faxed and mailed lab results and case report forms. The Fellow will also monitor the reporting of electronic laboratory results (ELRs) to the NEDSS-Base System, RIDOH’s integrated surveillance system. The Fellow will help develop revised surveillance protocols based on CSTE/CDC case definitions and internal workflows. ELR onboarding is advancing rapidly and the program’s workflows are changing from a largely paper-based model to an electronic model. The Fellow will lead quality assurance and analysis efforts and will describe the landscape of HBV and HCV positive lab testing. The Fellow will work closely with the Informatics Team to validate new ELR streams. The Fellow will also participate in monthly epi-workgroups, Center Team meetings, and collaborate with the viral hepatitis prevention program and perinatal hepatitis prevention program (housed in the immunization program). These collaborations will be developed over time to improve RIDOH’s ability to describe the hepatitis B and C epidemics. The Fellow will update the current version of the HCV Epidemiological Profile, last produced in 2016. This task will see the Fellow interfacing with the Cancer Registrar, Center for Vital Records, and other programs across the Department to augment traditional case reporting data. As laboratory reporting becomes standardized, complete, timely, and accurate, the Fellow will help to develop public health intervention activities such as partner services, targeted testing campaigns, and social media campaigns to support prevention and testing efforts.

Day-to-Day Activities

On a daily basis the Fellow will support staff conducting viral hepatitis laboratory result and case report form entry. This means checking in routinely on any needs of the staff. The Fellow will review entered data in the NBS on a daily / weekly basis and provide feedback on any quality issues. The Fellow will attend Center and Division meetings to share findings from the program and learn from others in the Center/Division. On a weekly basis, at least, the Fellow will meet with the Surveillance and Evaluation Manager (secondary mentor) to discuss program progress and opportunities for continual growth. On a biweekly / monthly basis the Fellow will have formal meetings with the primary mentor (consultant Medical Director) but the consultant Medical Director is onsite throughout the week and will be available to provide additional support and feedback. Monthly, the Fellow will analyze surveillance data and provide reports to leadership for review. Quarterly, the Fellow will conduct additional QA activities, and expanded data reports for sharing with community members and Department leadership. The Fellow will also support grant-writing activities, contributing to the viral hepatitis prevention progress report, HIV progress report, and STD progress report, as needed. The Fellow may be asked to speak at community meetings, including the Rhode Island Hepatitis C Action Coalition meeting which is convened quarterly. The expansion of existing reports is possible and would offer the Fellow the opportunity to work with partner Centers such as the Center for Vital Records, State Cancer Registrar, and Perinatal Hepatitis Prevention Program.
**Potential Projects**

**Surveillance**

**Expanded Hepatitis B and C Surveillance Across Rhode Island**

This project will be focused on expanding Rhode Island's current HBV and HCV surveillance programs. RIDOH has maintained a largely paper-based system with limited staff. The project would focus on harnessing advancements in reporting via ELR to improve data analysis and reporting efforts. Improvements will also translate into practice by focusing limited prevention and outreach efforts on areas that show new transmission or clusters of disease. The project will include protocol development, data analysis, report development, and data dissemination. The project will provide opportunity for participating in community events to share findings.

**Surveillance**

**Evaluating the Completeness and Timeliness of Hepatitis B and C reporting in Rhode Island**

To date RIDOH has maintained a largely paper-based surveillance system. Onboarding of ELR has reduced data entry burden and increased completeness of data to the NBS surveillance system. This project will explore improvements in completeness and timeliness of reporting HBV and HCV results, including liver function tests. This evaluation will explore gaps in reporting by partnering with the perinatal program to identify unreported cases of pregnant women or exposed infants and propose quality improvement measures to ensure greater completeness of reporting and efficiencies of data sharing between RIDOH programs.

**Major Project**

**Rhode Island HBV-HCV Epidemiological Profile**

RIDOH was the recipient of an ASTHO grant to create the state's first HCV epi profile in 2016. Since, no updated document has been produced. This major project will include partnering with commercial labs, Center for Vital Records, the Cancer Registrar, analysts working with hospitalization data, and other data sources to receive, analyze, and disseminate a comprehensive report on HBV and HCV in Rhode Island. Traditional case-based surveillance data are limited and this approach will allow a robust view of hepatitis in RI in the absence of substantial case trend data. The project will also offer the opportunity to partner with the drug overdose prevention and HIV programs to assess co-morbidities with viral hepatitis.

**Additional Project**

**Development of Statewide HCV Elimination Plan**

RIDOH aims to partner with other state agencies, community agencies, local experts, and the community to develop a comprehensive plan for HCV elimination in Rhode Island. This project would focus on synthesizing the findings of the surveillance system evaluation and epidemiological profile with information from key partners to establish a plan for reducing HCV burden. The fellow would support data management and analysis for the plan and contribute to plan writing. The Fellow would be a key point of contact with other organization staff. As part of this project the Fellow would conduct literature reviews for national guidance and examples of existing strategic plans / elimination plans.
**Preparedness Role**

The fellow will complete the emergency preparedness training required by all RIDOH staff, to include FEMA’s Independent Study (IS)-100, IS-200, and IS-700, and would be considered for an appropriate position within RIDOH’s Incident Command System (ICS), should it be activated during the fellow’s tenure at RIDOH. Because RIDOH currently has a working group that is planning for the response to a potential outbreak of Hepatitis A in individuals who are experiencing homelessness and/or are intravenous drug using, the fellow would become a member of this working group to assist in the design of plans, training, exercises, and messaging related to a potential outbreak.

**Additional Activities**

All Division staff support a rotating on-call system during business hours. Calls from the public and providers are triaged by on-call staff. The Fellow will support this system by being on call once or twice a month. This individual will be cross-trained in program areas with a high volume of calls like responding to flu calls, norovirus reports, animal bites, and other reports of potential outbreaks. This activity helps to integrate staff from disparate program areas into the larger Division-team and promotes learning.

**Mentors**

**Primary**
Philip Chan MD MS  
Consultant Medical Director

**Secondary**
Theodore Marak MPH BS  
Surveillance and Evaluation Manager