Assignment Description

The fellow will be assigned to the California Department of Public Health, Sexually Transmitted Diseases Control Branch, Surveillance, Epidemiology, Assessment, and Evaluation Section, which oversees epidemiology and evaluation for bacterial STDs (chlamydia, gonorrhea, and syphilis), along with hepatitis C virus (HCV). The team performs core and enhanced surveillance end epidemiology, and also provides program evaluation support to the rest of the STD Control Branch, working in cross-cutting and interdisciplinary teams. The fellow will work with a team of highly experienced epidemiologists on time-limited, innovative projects, and have extensive opportunities for learning and professional growth.

Day-to-Day Activities

Fellows will conduct data analysis and develop protocols, reports, and other materials for local health departments, health care providers, and members of the public on topics related to STDs and viral hepatitis. Potential projects may include, but not be limited to: (1) Matching complex data sets, such as HIV records, hepatitis C records, STD, birth, death, and/or cancer records to assess and describe STD and viral hepatitis-related morbidity, coinfection, mortality, and care cascades; (2) analysis of hospitalization data to assess STD and viral hepatitis-related costs and consequences (specifically liver disease, liver cancer, and/or neurologic and ocular syphilis); (3) Assess HIV and STD-related outcomes from HIV/STD partner services and case follow up; (4) Inform planning/implementation of health informatics projects, including reporting of negative HCV laboratory tests; (5) Develop protocols for integrating harm reduction into disaster preparedness. Fellows may also perform other special projects as assigned. Job responsibilities include data collection, analysis, and quality assurance, fact sheet and report generation, phone and email communication, and oral presentations. Additional duties include literature review, creation and managing of spreadsheets, and creation of PowerPoint slide resources. Co-workers include clinicians, epidemiologists, and program development and evaluation experts in the CA STD Control Branch and the Office of Viral Hepatitis Prevention.

Potential Projects

Surveillance Activity  Assess HIV/HCV/Syphilis Comorbidity/Syndemic

Conduct complex data matches to assess comorbidities, including developing and applying proxies for HIV, HCV, and/or STD care using laboratory data and assessing the care cascade to identify gaps and missed opportunities. Use finding to inform the development of an HIV/HCV microelimination campaign in California, including identify priority counties and populations with the largest gaps in clinical HIV/HCV care. If time permits, assess HIV/HCV/syphilis syndemics/coinfections.
Surveillance Evaluation

Assess Hospitalization Data as Sentinel Surveillance

Request and analyze data from the Office of Statewide Health Planning and Development (OSHPD) on hospitalizations related to neuro-syphilis, ocular syphilis, and/or liver disease complications from hepatitis B and hepatitis C. Assess total hospitalization charges, including proportion of costs charged to public vs. private payers. Assess whether OSHPD hospitalization data could serve as a sentinel surveillance site and system for otherwise rare syphilis complications.

Major Project

Evaluate HIV/STD Partner Services

Assess HIV and STD-related outcomes from HIV/STD partner services and case follow up, comparing the performance metrics collected by CDC and actual client-level outcomes, to determine whether public health goals are met and metrics are meaningful.

Additional Project

Inform Planning/Implementation of Informatics Projects

Assist with the planning and implementation of informatics projects to improve public health surveillance infrastructure, including reporting and analysis of negative test results; reporting of communicable diseases from electronic health records; and use of communicable disease surveillance systems to collect data on non-fatal opioid overdoses.

Additional Project

Integrate Harm Reduction into Disaster Preparedness

Assess existing disaster preparedness plans and protocols and identify areas for integrating harm reduction. Conduct key informant interviews to identify gaps in local disaster response during recent Northern California wildfires, including emergency shelters being unprepared to deal with injection drug use, sharps disposal, or distribution of safe injection supplies. Identify strategies for addressing the medication needs of people with opioid use disorders in disasters.

Preparedness Role

One exciting role that the fellow could play in emergency preparedness is helping to develop protocols and best practices for how to integrate harm reduction into emergency preparedness planning. During the recent fires in Northern California, thousands of people were displaced and/or made homeless overnight, and the emergency shelters were unprepared for the injection drug use that took place there. They reached out to local harm reduction programs for assistance with sharps containers and safe injection kits. There was also little recourse for people unable to access drugs and who were in opioid withdrawal. Syringe exchange programs did what they could but many of their volunteers also lost their homes during the fires. It would be great if a CSTE fellow could think about and develop protocols for how to address the needs of people who inject drugs during disasters, which have become all too frequent in California.
**Additional Activities**

Depending on the timing of document approval, the CSTE fellow could potentially help disseminate the findings of the first-ever California-specific assessment of county-level vulnerability to a rapid increase in fatal opioid overdoses, HIV, and/or hepatitis C infections related to injection drug use.

There is also a high burden of congenital syphilis in California and any fellow interested in the topic would have plenty to do!

**Mentors**

**Primary**
- Ryan Murphy MPH, PhD
  - Chief, Surveillance, Epidemiology, Assessment, and Evaluation Section

**Secondary**
- Rachel McLean MPH
  - Chief, Office of Viral Hepatitis Prevention