

Infectious Diseases- Q

Assignment Description:

The CDC Quarantine Station and County Epidemiology and Immunization Services are co-located. Fellow will work on projects with both units, some as collaborations between CDC and the County, and some as separate projects for each institution. The focus will be on infectious disease surveillance, outbreak investigations, and immigrant and border health, and preparedness. Non communicable disease projects are also a possibility.

Day-to-Day Activities:

On call phone duty for Community Epidemiology on a rotating schedule. Developing and implement project protocols. Participating in outbreak investigations. Analyzing data and putting together poster and oral presentations. Writing manuscripts, meeting with supervisors, quarantine and epidemiology staff meetings, meetings with project partners, etc

Potential Projects:

- Expanding public health and communicable disease surveillance using electronic health records and electronic lab reporting. With a recently established local health information exchange (HIE), to evaluate and assess timeliness and completeness of disease reporting and operational efficiencies as manual routines are less utilized.
- Evaluate surveillance for Coccidioidomycosis in San Diego County including an assessment of clinical and laboratory data and providing a descriptive analysis of cases diagnosed from 2008-2012
- Pilot surveillance project for *Cryptococcus gattii* infections in CA and San Diego County. *C. gattii* is a fungus found in soil and in association with certain trees. Infection can occur following inhalation of spores and may lead to respiratory or CNS disease. Historically, most cases have been reported in tropical and subtropical environments but *C. gattii* has been emerging in California, the U.S. Pacific Northwest, and British Columbia since 1999. While *C. gattii* infections are not currently reportable in California, more information is needed to describe the clinical presentation and epidemiology of this unusual disease.
- Conduct trend analysis of *Salmonella* serotypes, County of San Diego, 2009-2012 and participate in a case-case comparison study using *Salmonella* risk factor and serotype information
- Participate in and lead foodborne outbreak investigations identified through PulseNet or other surveillance mechanisms
- Latent tuberculosis infection testing, treatment and completion in HIV and/or diabetes clinics in San Diego County
- Screening for tuberculosis in San Diego universities (UCSD, USD) and colleges, active cases identified, latent infections identified, prevention.
- Collaboration with the Northern Border College in Baja California on the on a Northern Border Migration Survey
- Collaboration with CDC and San Diego County Office of Public Health on evaluation of emergency communication for non-English speakers
- Evaluation of civil surgeons medical examination files of visa status adjusters seeking US citizenship
- Assist in the development of an analytic framework for countywide BMI surveillance and future chronic disease surveillance. PHS is currently receiving BMI from a variety of clinics and hopes to expand the system in the future to include blood pressure, cholesterol and glucose measures

directly from healthcare providers. We are developing statistical models to determine how to interpret data from this novel source for use in tracking community health..

Preparedness Role:

Both the Quarantine Station and County conduct regular preparedness tabletop exercises with partners. The Fellow will have the opportunity to help design, conduct and monitor and report on such exercises. The Fellow will also participate as a staff member in responses as needed and appropriate.

Assignment Location: San Diego, CA

Primary Mentor: Stephen Waterman, MD, MPH
Lead, U.S.-Mexico Unit, Senior Medical Epi
CDC Division of Global Migration and Quarantine

Secondary Mentor: Michele Ginsberg, MD
Chief, Epidemiology and Immunization Services
County of San Diego Office of Public Health