

## **Infectious Diseases-HAI, Infectious Diseases**

### **Los Angeles County, Department of Public Health, Acute Communicable Disease Control Program**

Los Angeles, California

#### **Assignment Description**

The fellow will work primarily in the Healthcare Outreach Unit (HOU) on issues related to healthcare associated infections (HAI). The HOU is housed within the Acute Communicable Disease Control Program, which is the lead program for most infectious disease public health activities and is the designated public health program responder for emerging infectious diseases, such as Ebola and Zika Virus. The fellow will work on a variety of activities and projects with LAC DPH physicians, epidemiologists and public health nurses. This will include outreach, surveillance, antibiotic stewardship and infection prevention and control activities with approximately 100 acute care hospitals, 450 skilled nursing facilities, 250 ambulatory surgical centers and other outpatient facilities in LAC.

#### **Day-to-Day Activities**

The fellow will investigate outbreaks in both healthcare and community settings, maintain surveillance of healthcare associated infections and communicable disease within the community; collect, analyze and interpret data, conduct research projects, conduct infection control assessments in acute care hospitals, skilled nursing facilities and ambulatory surgery centers, collaborate with external partners to improve antibiotic stewardship practices and improve HAI and antibiotic resistance, participate in HAI meetings and conferences, including hospital infection control committee and disaster resource center meetings.

## **Potential Projects**

### **Surveillance      Establishment of Dialysis surveillance Activity**

LAC DPH plans to expand our existing use of the National Healthcare Safety Network by acute care and long-term care facilities to build a healthcare-associated infection and adverse event surveillance system specific to dialysis centers in the County. The fellow would coordinate with external partners, including dialysis facilities and networks, to determine variables and outcomes to collect, and conduct the first county-wide HAI surveillance system for dialysis centers.

### **Surveillance      HAIs in alternative medicine Evaluation**

Los Angeles County has one of the largest complementary and alternative medical communities in the country. As the field grows, new patient safety concerns and infection risks arise, especially surrounding acupuncture, infusions, injections, and trendy procedures such as “vampire facials” and “bee therapy”. The fellow would work to identify and address barriers to infection prevention in order to prevent HAIs in these alternative settings.

### **Major Project      Leading and/or Supporting Outbreak investigations**

The Healthcare Outreach Unit within Los Angeles County is involved in over 100 healthcare-associated outbreaks annually, for which full epidemiologic investigations are often required. Past fellows have supported and sometimes led large, multi-jurisdictional outbreaks of novel and emerging pathogens. HAI outbreaks occur in a variety of settings, including hospitals, long term care facilities, outpatient surgery, optometry, acupuncture, and dental clinics. Past examples include “Conjunctivitis in an Optometry Clinic” and “Prosthetic Joint Infections among Hip and Knee Arthroplasty Patients in a Single Hospital.”

### **Major Project      Los Angeles Quarantine Station Collaboration**

Botulism is a severe neuro-paralytic illness that requires heptavalent botulism antitoxin (HBAT) for treatment. HBAT is one of the few drugs that is only available through CDC Quarantine Stations. Los Angeles County has a Quarantine & Border Health Services Branch, Centers for Disease Control and Prevention stationed at the airport (LAX). Because Los Angeles County has high numbers of botulism, the Quarantine Station in Los Angeles releases the most HBAT compared with other stations. While there is ample data on botulism cases needing HBAT, few analyses have been performed. The fellow would analyze suspected clinical botulism case-patient clinical and laboratory data after HBAT release.

**Additional Project      Combating Drug-Resistant Organisms**

In an effort to combat the spread of multi-drug resistant organisms (MDROs) in our communities, the acute communicable disease control program has instituted protocols to detect, respond to, and contain them. For example, carbapenem-resistant Enterobacteriaceae (CRE) was made reportable in January 2017, offering a wide variety of analytical possibilities for the fellow. The fellow can also investigate individual case reports of rare and emerging MDROs of epidemiological concern, e.g. mcr-positive bacteria, to control its spread and prevent infections.

**Preparedness Role**

The fellow will receive training in Incident Command and participate in any emergency response that may arise. The fellow will be expected to participate in scheduled disaster drills and exercises as appropriate. Currently, the ACDC program is in ICS as a result of the Hepatitis A outbreak and West Nile Virus activity.

**Additional Activities**

- Review and promote of safe injection practices
- Increasing Influenza Vaccine Rates in Healthcare Personnel
- Member of the HAI-Antibiotic Resistance Committee

**Mentors**

<b>Primary</b>	Dawn Terashita MD, MPH Medical Epidemiologist
<b>Secondary</b>	Benjamin Schwartz MD Deputy Director, Acute Communicable Disease Control Program