

CSTE Fellowship Position

Primary: Division of Global Migration and Quarantine, CDC (San Francisco, California)

Secondary: Tuberculosis Control Branch, California Department of Health Services (Berkeley, California)

This fellowship position is primarily located in San Francisco, California. It is a partnership of the Centers for Disease Control and Prevention's (CDC) San Francisco Quarantine Station and the Tuberculosis (TB) Control Branch, Division of Communicable Disease Control, California Department of Health Services (CDHS).

The San Francisco Quarantine Station is operated by the Division of Global Migration and Quarantine (DGMQ) within CDC's National Center for Infectious Diseases. The DGMQ's primary responsibility is to prevent the introduction, transmission, or spread of all communicable diseases from foreign countries to the United States. It oversees the medical examination of refugees and immigrants abroad and often within the United States; screens arriving international passengers for illness of public health importance; and coordinates with state and local public health agencies to ensure that refugees and immigrants receive needed follow up and treatment. It also provides travelers with essential health information, responds to immigration emergencies, and collects worldwide health data.

DGMQ's current activities include surveillance for diseases with epidemic potential (e.g., SARS, avian influenza) and working with other federal partners and with state and local health departments to respond to outbreaks of these and similar diseases. In addition, stopping the entry of travelers with infectious tuberculosis (i.e., U.S. citizens, immigrants, and refugees) is one of the primary functions. DGMQ has also become more actively involved in preparation for bioterrorism response through collaboration with other CDC components, public health agencies, and Department of Defense. CDHS' TB Control Branch primary activity is to control and prevent tuberculosis with special activities to control and prevent multiply drug resistant TB and TB in refugee and immigrant populations. With regards to tuberculosis, CDC and CDHS are currently working closely to assess and modify tuberculosis screening and entry policies for refugees. Much of the work of this fellow will be to continue and expand upon this work.

The public health activities of the two sponsoring agencies are complementary and will give the fellow experience with a broad range of federal and state programs. To understand the refugee and immigrant screening process, the fellow will initially take part in all of the activities of the staff at the San Francisco Quarantine Station although there will be a greater emphasis on those activities related to refugee entry. In addition, to understand the activities involved in TB control and refugee health, the fellow will take part in selected activities at CDHS including TB case investigation and management.

Following these initial activities, the fellow will be expected to participate in outbreak investigation if possible, evaluate the Quarantine Station's TB refugee and immigrant surveillance system and present findings in an oral or written format to appropriate audiences. In addition, in consultation with the primary and secondary supervisors, the fellow will design a research project related to the TB screening process among refugees and immigrants in

California. This project may be a programmatic evaluation or a research study. These projects include, but are not limited to:

- Description of the proportion of refugees and immigrants coming to California with latent and active pulmonary tuberculosis
- Description and assessment of TB follow-up, treatment and outcome of refugees and immigrants with latent and old TB
- Description of treatment outcome of refugees and immigrants with MDRTB and outcome of prophylaxis of contacts to persons with MDRTB
- Evaluation of an algorithm used to determine the period during which a person with active pulmonary TB is infectious
- Risk factors for development of reactivation TB among refugees and immigrants with latent or old TB at entry to the U.S.
- Cost-effectiveness study of methods to more rapidly notify state and local health departments
- Programmatic study to identify reasons for delayed identification, notification, follow-up and treatment of refugees and immigrants with latent/old TB at entry to the U.S.
- Evaluate performance of TB disease classification by panel physicians compared to classification by local physicians experienced with TB

The primary outcome of all evaluations or studies will be to modify and improve domestic tuberculosis screening and treatment policies for refugees and immigrants if necessary.

Although the primary emphasis of this project is tuberculosis, this fellow will have many opportunities to be involved in many other activities related to bioterrorism preparedness, traveler's health, vessel safety, and animal health. In addition, our program is committed to giving the fellow an experience that would address each of the required competencies.

Locations:

- DGMQ Quarantine Station – San Francisco, California – San Francisco International Airport
- CDHS TB Control Branch Offices – Berkeley, California

Primary mentor: Anthony A. Marfin, MD, MPH, MA

Quarantine Medical Officer, DGMQ, CDC, San Francisco, CA

Secondary mentor: Jenny Flood, MD, MPH; Chief, Surveillance and Epidemiology Section, TB Control Branch, CDHS; Berkeley, CA

Associate mentors: Duc Vugia, MD, MPH; Chief, Infectious Diseases Branch, Division of Communicable Disease Control, CDHS; Berkeley, CA