

Infectious Disease

Assignment Description

The New York City Department of Health and Mental Hygiene (DOHMH) is a leader in public health practice and policy. The DOHMH is staffed by over 6,000 employees that serve over 8 million people. The fellow will be assigned to the Bureau of TB Control which is housed within the Division of Disease Control of the DOHMH. NYC has one of the highest rates of TB (11 per 100,000) in the US and the BTBC is the largest TB control program in the US with approximately 250 staff. The BTBC is composed of the following offices: Office of the Director, Surveillance, Epidemiology, Outreach and Training, Medical Affairs, Field Services, Clinic Operations, Administration and Human Resources, Quality Assurance and Information Technology and Informatics.

The fellow will be assigned to the BTBC Epidemiology Office and will function as a full member of that office. The Epidemiology Office is comprised of a research team, a molecular epidemiology team and a field epidemiology and outbreak investigation team. The fellow will have the opportunity to work closely with each of the teams of the Office of Epidemiology. The BTBC is an interdisciplinary setting and the fellow will also work in close collaboration with the staff in other offices, particularly the Office of the Director, Surveillance, Outreach and Training and Medical Affairs. Working at the BTBC will provide a fellow a unique opportunity to participate in many local public health agency functions in a diverse setting where there are high rates of infectious and chronic diseases along with social disparities.

Day-to- Day Activities

The fellow will participate in routine epidemiology activities such as analyzing epidemiologic and surveillance data, participating in research from the protocol development stage through to manuscript preparation, conducting outbreak and cluster investigations and presenting at internal and external seminars. These activities will be an opportunity for the fellow to become familiar with program management including creating and revising protocols, working with large datasets, and being involved in many aspects of the largest TB control program in the country. The fellow will attend the BTBC new staff training, monthly TB-related journal club and methods seminars, the Columbia Mailman School of Public Health TB epidemiology course, TB management seminars, epidemiology staff meetings, DOHMH epidemiology grand rounds, relevant team meetings and Citywide TB rounds. SAS and other relevant computer software training will be available along with other trainings at the NYC DOHMH in many areas such as scientific writing, presentation skills, and epidemiology.

Potential Projects

Outbreak/field investigation:

- a. Lead investigator for an expanded contact investigation (ECI) at a congregate setting (school, worksite, hospital, etc.) which will involve working with the site to conduct a presentation on TB and its transmission, if needed, to arrange testing of person exposed to TB, ensuring all that are exposed are evaluated, reviewing and analyzing the evaluation results and writing a report of the investigation.

b. Participate and lead genotype cluster investigations which will involve review of patient records and re-interviews of the patients to identify sites of exposure and epidemiologic links between patients.

Possible data analysis or program evaluation projects:

- a. Evaluate usefulness of conducting contact investigations for sputum smear-negative, culture-positive TB by comparing transmission in these cases versus sputum smear-positive TB and determine what factors are associated with transmission.
- b. Describe the prevalence and types of nontuberculous mycobacteria in NYC using information available from the Public Health Laboratory.
- c. Validate and evaluate data in the new TB registry system.

There will be numerous opportunities for the fellow to present the results from their projects, both in written and oral format, including at Bureau-level, Agency level and at national or international TB meetings in addition to the annual CSTE meeting.

Preparedness Role

The fellow will be part of the DOHMH's emergency response structure and be assigned to the Epidemiology and Surveillance sub-section. This section is responsible for 1) investigating the incident to characterize event by person, place and time; 2) collecting data and developing databases; 3) implementing enhanced, active or passive syndromic surveillance to monitor impact and recommend preventive measures. The fellow will receive emergency response training and may have the opportunity to participate in emergency response exercises such as point of distribution (POD) exercises.

Assignment Location:	New York, New York
Primary Mentor:	Shama Ahuja, PhD, MPH Director of Tuberculosis Epidemiology New York City Department of Health and Mental Hygiene
Secondary Mentor:	Chrispin Kambili, MD Assistant Commissioner, Bureau of Tuberculosis Control New York City Department of Health and Mental Hygiene