

Infectious Diseases

Assignment Description:

The New York City Department of Health and Mental Hygiene (NYC DOHMH) is a leader in public health practice and policy. NYC DOHMH is staffed by approximately 6,000 employees that serve over eight million people.

The fellow will be assigned to the Bureau of Tuberculosis Control (BTBC) which is housed within the Division of Disease Control of the NYC DOHMH. NYC has one of the highest rates of TB (8.5 per 100,000 in 2011) in the US and the BTBC is the largest TB control program in the US with approximately 250 staff. BTBC is composed of the following offices: Bureau Director, Surveillance and Epidemiology, Clinic Operations, Field Operations, Administration, and Medical Affairs.

The fellow will be assigned to the BTBC Surveillance and Epidemiology Office and will function as a full member of that office. The Surveillance and Epidemiology Office is comprised of a surveillance unit, field epidemiology team, and genotyping team. Surveillance and Epidemiology Office staff performs a number of functions including TB registry maintenance, research, and TB outbreak and cluster investigations. The fellow will have the opportunity to work closely with each of the units and teams of the Office of Surveillance and Epidemiology. The BTBC is an interdisciplinary setting and the fellow will also work in close collaboration with staff in other offices and units, particularly the Office of the Director (Planning and Policy unit and Education, Training and Outreach unit) and Medical Affairs. Working at BTBC will provide the 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 surveillance and epidemiology activities such as analyzing epidemiologic and surveillance data, participating in research from the protocol development stage through manuscript preparation, conducting outbreak and cluster investigations, and presenting at internal and external seminars. These activities will provide opportunities for the fellow to gain hands-on program management experience (including creating and revising protocols), work with large datasets, and be involved in many aspects of the largest TB control program in the country.

The fellow will have the opportunity to attend a BTBC orientation, monthly TB-related journal club and methods seminars, the Columbia Mailman School of Public Health TB epidemiology course, 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

- Lead investigator for an expanded contact investigation (ECI) at a congregate setting (school, worksite, hospital, etc.) that has had a TB exposure. This typically involves working with the site to conduct a presentation on TB and its transmission, arranging testing of persons exposed to TB, ensuring all that are exposed are evaluated, reviewing and analyzing the evaluation results to make a transmission assessment, and writing a report of the investigation.

- Participate and lead genotype cluster investigations. This involves reviewing patient records and re-interviewing patients to identify sites of exposure and epidemiologic links between patients.

Possible research or program evaluation projects

- Evaluation of TB in children, particularly transmission of TB from foreign-born parents to US-born children
- Assessing risk of TB transmission from smear-negative culture positive TB patients

Possible surveillance projects

- Conduct quality assurance activities on TB surveillance data that are reported to CDC
- Creation and usability of educational materials for new surveillance and case management system
- Identify key non-RVCT variables and evaluate their completeness in the new surveillance 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 NYC DOHMH's emergency response structure and be assigned to the Surveillance/Epidemiology 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 City, New York

Primary Mentor: Shama Ahuja, PhD, MPH
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Secondary Mentor: Lisa Trieu, MPH
City Research Scientist/Field Epidemiology Supervisor
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