

The New York City Department of Health and Mental Hygiene (DOHMH) is a well staffed city health department with over 6,000 employees serving over 8 million New Yorkers. The city is known for its ethnic and socioeconomic diversity and its large number of visitors and immigrants. Nationally, the department is frequently on the forefront of responding to emerging health threats, innovations in public health surveillance, and programmatic intervention.

The fellow will be assigned to the Bureau of HIV/AIDS Prevention and Control, one of seven Bureaus located within the Division of Disease Control. New York has the largest and most diverse HIV epidemic in the country and is home to 1 of 6 HIV-infected Americans. NYC's HIV prevalence is greater than 1.2% and over 1300 New Yorkers die each year from HIV-related illness. The Bureau is lead by Scott Kellerman, MD, MPH, the fellow's secondary supervisor, and has over 250 employees, including numerous masters and doctorate level epidemiologists and physicians.

The Bureau's surveillance program investigates and reports approximately 4,000 new HIV diagnoses a year and receives an equal number of AIDS diagnoses annually. The Bureau's epidemiology staff are also responsible for investigation of any identified clusters of HIV infections or HIV cases of special public health interest. Several new surveillance systems are being implemented to identify recent HIV infections in close to real time and antiretroviral-resistant infections among the newly infected. The Bureau administers over 200 million dollars of programmatic funding for HIV prevention, treatment and other services for HIV-infected persons.

The fellow would join a committed group of public health professionals working to address this highly preventable, life-threatening, prevalent infectious disease at the population level through innovative surveillance and programmatic interventions. The fellow would specifically concentrate on areas where epidemiologic analysis can impact the Bureau's understanding of the state of the epidemic in ways that inform its programmatic interventions. Focus areas for the fellow would include 1) acute HIV infection, 2) early detection of HIV, and 3) understanding HIV-related morbidity and mortality in NYC.

Potential projects include:

1. Surveillance or programmatic evaluation projects
 - a. Evaluating the new acute HIV infection surveillance system using pooled serum for nucleic acid testing;
 - b. Evaluating the new STARHS (Serologic Testing Algorithm for Recent HIV Seroconversions) HIV incidence surveillance system;
 - c. Evaluating Ryan White funded programs for maintaining HIV-infected persons in effective medical care.
2. Data analysis projects:
 - a. Crossmatch NYC's HIV/AIDS Registry with historical death certificate data from vital statistics on multiple causes of death to characterize and assess the preventability of HIV-related deaths
 - b. Use a citywide hospitalization database to characterize HIV-related hospitalizations and assess the impact of funded treatment and care programs;
 - c. Compare genotypes of new HIV infections to distinguish relatedness of HIV infections by geographic region, transmission risk, calendar time, and racial/ethnic group;

- d. Conduct a meta-analysis of existing published studies to assess if and when pre- and post-test counseling impacts behavior of people tested for HIV
- 3. Outbreak/field investigation projects
 - a. Investigate any clusters of HIV infections identified through acute HIV infection surveillance or the HIV genotype surveillance;
 - b. Investigate any HIV cases of special public health interest;
 - c. Opportunity also exists to participate in field investigations outside the Bureau, in particular, in foodborne outbreak investigations in the Bureau of Communicable Disease.
- 4. Other day-to-day activities would be tailored to the fellow's interests but could include:
 - a. Attending weekly Bureau-wide planning meeting that focus on strategic planning and presentation of new Bureau initiatives;
 - b. Attending meetings with Bureau Sexually Transmitted Disease Control and Correctional Health Services regarding ongoing programmatic collaborations;
 - c. Monthly surveillance conference calls with New York State regarding issues with surveillance data transfers and data flow;
 - d. If the fellow has a specific interest in an area of HIV prevention and control, this would be accommodated (e.g. anti-stigma campaigns; sex harm reduction/condom distribution; needle exchange; prevention in women, people of color or transgender persons, etc);
 - e. Attending DOHMH's many formal educational opportunities including Epidemiology Grand Rounds, research seminars, and trainings;
 - f. Participating in collaborations with HIV researchers outside the Bureau and outside of DOHMH, including academic public health partners (e.g., Columbia University and Hunter College).

Opportunities to work in interdisciplinary teams:

HIV prevention and control is inherently interdisciplinary involving collaboration between persons with expertise in behavioral intervention, research methods, community intervention, medicine, social services, and epidemiology among other disciplines. All these disciplines are represented within the Bureau and the fellow will have the opportunity to work with persons of such diverse expertise.

The fellow will be integrated into DOHMH's emergency response structure, which is based on the Incident Management System (IMS). Like all DOHMH staff, he or she will be assigned to a specific response group and will participate in planning or emergency response activities, as needed.

Assignment Location: New York City

Primary Mentor: Beth Begier, MD, MPH
Medical Director, HIV Epidemiology Program

Advanced Degrees: MPH, Johns Hopkins Bloomberg School of Public Health (2002)
MD, University of Pennsylvania (1994)

New York City-Begier

Secondary Mentor: Scott Kellerman, MD, MPH
Assistant Commissioner of Health

Advanced Degrees: MPH, Rollins School of Public Health, Emory University
MD, University of South Florida