

The Bureau of Epidemiology Services within the New York City Department of Health and Mental Hygiene is a multidisciplinary unit with the goal of combining epidemiologic research and data analyses with policy development and recommendations. The unit undertakes a wide variety of projects with broad Departmental applications and provides consultation services to all categorical Departmental programs (including those responsible for infectious diseases, chronic diseases, community health, environmental/occupational health, and mental health). The bureau conducts cutting-edge research of the highest caliber that can and does find immediate application in our local public health responsibilities. Recent examples of these projects include dead bird clustering analysis as an early warning system for West Nile virus (published in the June issue of *Emerging Infectious Diseases*), syndromic surveillance for bioterrorism (BT) and non-BT applications (several articles in the June issue of the *Journal of Urban Health*), and a community health survey that provides ground-breaking information on behavioral risk factors in each of 33 New York City neighborhoods (over 10 topic-specific reports published, and several manuscripts in preparation). The bureau's multidisciplinary staff includes four graduates of the Epidemic Intelligence Service, seven doctoral-level scientists (epidemiology, statistics, medical anthropology, psychiatric epidemiology, infectious disease epidemiology), as well as area expertise in complex survey design and analysis, geographical information systems (GIS), health care systems and managed care. The Bureau is centrally involved in the conduct of monthly Epidemiology Grand Rounds, Epidemiology Seminar Series, and a scientific writing club. Several staff members teach epidemiology and public health at local universities (including Columbia University and Cornell Medical College).

The fellow would participate in the broad range of activities Bureau activities including epidemiologic consultation (e.g. investigation of high gonorrhea rates among teenage girls, evaluation of the restaurant inspection program, or description of dog bites in New York City), large dataset analyses and report-writing (e.g. "The Health of Immigrants" based on the 2003 Community Health Survey), research and development of analytic methods (e.g. use of syndromic surveillance data to document the health impact of the 2003 Smoke-Free Air Act), and primary data collection (e.g. height/weight survey in NYC public schools). Day-to-day activities will vary between assisting senior researcher on large analytic projects using statistical software programs such as SAS, writing reports for the public, and conducting data collection on smaller research projects.

The fellow will receive training and experience in bioterrorism preparedness and response through three mechanisms: (1) Participation in design, evaluation, and operation of syndromic surveillance for bioterrorism; (2) Training programs provided by the DOHMH on bioterrorism preparedness and response, including training on Incident Command Structure (ICS); (3) Participation in the ICS, as a planning member of the Epidemiology and Surveillance section. Day-to-day planning activities may include: (a) design and piloting of generic templates for standard data collection instruments; (b) developing template databases based on these standard data collection instruments that can be rapidly modified for the specific public health event; (c) developing protocols for ensuring the laboratory specimens can be easily tracked (from specimen collection, to transport to the appropriate public health laboratories, to linking results to the patient record); (d) pre-preparing basic analysis programs: line lists, frequencies, epidemic curves. In the event of an emergency, day-to-day activities will depend on the nature of the emergency, but may include: (a) adapting previously developed generic template database to the format of the final data collection instrument(s) being used for the current public health emergency; (b) overseeing electronic transfer of data to NYSDOH, CDC or

other public health partners; (c) analyzing data in cooperation with the Epidemiology subcommittee, providing daily reports summarizing the current findings of the surveillance and epidemiologic investigations (e.g., summary tables, line lists, basic frequencies and epidemic curves).

Assignment Location: New York City, NY

Primary Mentor: Lorna Thorpe
Deputy Commissioner, Division of Epidemiology (2004-present)

Advanced Degree: PhD, University of Illinois at Chicago (2000)

Secondary Mentor: Farzad Mostashari, MD, MSPH
Assistant Commissioner, New York City Department of Health (April 2002-present)

Advanced Degrees: MD, Yale School of Medicine (1996)
MSPH, Harvard School of Public Health (1991)