Assignment Description

The Fellow would be assigned to the Bureau of Immunization within the NYC DOHMH. The Bureau is composed of units focused on: Clinical Services/Emergency Management, Surveillance, Perinatal Hepatitis B Prevention, Program Support (child care and school immunization compliance), Administration, Citywide Immunization Registry, Provider Quality Assurance, Vaccine Management, and Adult Immunization.

The Bureau is responsible for assuring that all New Yorkers are appropriately vaccinated across the entire lifespan. The Bureau is responsible for surveillance and control of vaccine preventable diseases in NYC. The Bureau regularly responds to outbreaks of measles, pertussis and mumps. In 2010 we experienced one of the largest outbreaks of mumps in the U.S. since 2006. In 2013 we experienced the largest outbreak of measles in the U.S. since 1996, and experienced another outbreak in 2014.

We are currently investigating outbreaks of pertussis in Brooklyn and mumps in Queens. Housed within the Bureau is the Citywide Immunization Registry, a mature population based registry which maintains the immunization records of all New Yorkers under 19 years of age, which is an important source of data about immunization status for children. In addition, the Bureau has adult immunization, clinical services and assessment units. Upon arrival, the Fellow would meet with each Unit Chief to learn about their work, explore possible projects and activities of interest.

Day-to-Day Activities

The Fellow will spend the majority of his/her time working on agreed upon projects. The Fellow will be incorporated into outbreak response and control activities. In addition, the Fellow will participate in vaccine-preventable disease surveillance unit activities such as weekly case classification, unit meetings, intake and investigation of reportable disease cases and intermittent analyses of surveillance data. The Fellow will attend meetings within the Bureau (e.g. NYC Childhood and Adult immunization Coalition meetings) and Agency (e.g. Epidemiology Grand Rounds) to gain exposure to all aspects of the Bureau's work.
**Potential Projects**

**Surveillance**  
**Oversee an outbreak investigation**

The CSTE Fellow would be responsible for overseeing the investigation and epidemiologic analysis of a vaccine preventable disease outbreak.

**Surveillance**  
**Varicella laboratory reporting surveillance system**

**Evaluation**

A potential project would include a surveillance system evaluation of the Bureau of Immunization's electronic laboratory reporting system for varicella. Such an evaluation is particularly important because this is currently the only source of reports for varicella in NYC. This would be timely in anticipation of a likely Health Code change that will require provider reporting of varicella in NYC. The Fellow would be involved in the implementation of case-based varicella surveillance.

**Major Project**  
**Adult immunization coverage**

A potential project would involve assessing adult immunization coverage in NYC. In 2009, pharmacists in NYC became authorized to administer influenza and pneumococcal vaccines. Since then, the authority has been expanded to include the pertussis vaccine (Tdap) and the zoster vaccine. Pharmacists are now required to report adult immunizations administered to the CIR (with consent). This source of data will afford the ability to monitor trends in immunization coverage of adults in NYC and to estimate and compare vaccination coverage from the CIR to that of the Community Health Survey.

**Surveillance**  
**Additional analytic projects could be developed specific to outbreaks or emergent issues that may arise during the fellowship.**

Examples of recent projects conducted by CSTE Fellows include:

- Evaluation of non-mumps parotitis during the 2014-2015 influenza season
- Mumps vaccine effectiveness and risk factors for disease in households during an outbreak in NYC
- Effectiveness of measles post-exposure prophylaxis during an outbreak in NYC
- Provider awareness and altered practices survey following a 2011-2012 pertussis outbreak in NYC

**Additional Project**  
**Pertussis vaccination during pregnancy**

Pertussis outbreaks have occurred in NYC over the past several years. Tdap vaccine during each pregnancy is critical for preventing pertussis in infants who are at greatest risk for severe complications. However, Tdap coverage in pregnancy remains low. The Bureau has written a strategic plan to improve pertussis vaccination coverage in pregnancy but it has not yet been implemented. The Fellow would participate in planning and implementation of the strategic plan and would have the opportunity to work on communication and messaging for the public and providers.
**Preparedness Role**
Bureau of Immunization staff have specific emergency preparedness roles and the CSTE Fellow would be able to participate in these activities. For example, the Bureau is part of the the Countermeasure Branch which is responsible for pandemic influenza planning and mass prophylaxis plans. The CSTE Fellow would attend emergency preparedness meetings. They would be engaged in emergency response activities. For example, the current CSTE Fellow was responsible for the monitoring of travelers from ebola-affected countries who were traveling between U.S. jurisdictions. Other fellows have participated in mass vaccination clinics and overseeing data collection at the clinics.

**Additional Activities**
The CSTE Fellow would have the opportunity to give presentations at local and national conferences and to write manuscripts for potential publication.

**Mentors**
**Primary**
Jennifer Rosen, MD  
Director of Epidemiology and Surveillance

**Secondary**
Jane Zucker, MD, MSc  
Assistant Commissioner