Biosurveillance Update - October 2, 2014

Ebola Virus

As many have heard through media and Centers for Disease Control (CDC) informational venues, an adult male diagnosed with Ebola Virus Disease (EVD) has been identified in Dallas, Texas. According to the CDC, the patient was asymptomatic when traveling to Texas from Liberia; however, approximately 4-5 days after his arrival, he became ill with high fever and vomiting. The patient went to Texas Health Presbyterian Hospital's Emergency Department in Dallas for treatment, where he was assessed, treated and released for an infection of unknown origin based on standing protocol. The patient's condition worsened and he called an ambulance in order to return to Texas Health Presbyterian Hospital's ED for further evaluation on September 28, 2014. Due to the patient's history, the ED staff isolated him immediately, contacted the CDC and the local health department, and tested him for EVD. He was positively diagnosed with EVD on September 30.

The CHCANYS Emergency Management Team is following this news and will further update health centers as more information becomes available. In the meantime, please ensure that all clinicians, emergency managers, and infection control officers are on the CDC's Health Alert Network and that their information is updated on the New York State Health Commerce System. Also, please ensure that all infection control procedures are reviewed with health center staff, and clearly identify any spaces that can be used for isolation if needed.

Recently, the CHCANYS/PCEPN Emergency Management Teams e-mailed an outpatient protocol for EVD developed and distributed by the New York City Department of Health and Mental Hygiene; <u>click</u> <u>here</u> to access it. Please review this protocol with all pertinent health center staff.

For more information regarding this recent development, please visit the CDC website.

Enterovirus D-68

In August 2014, several midwest hospitals notified the CDC of an increase in respiratory disease among children. Further testing by the CDC identified the virus EV-D68, a non-polio enterovirus. While encounters with suspected or confirmed EV-D68 infection cases are not required reporting at this time, public health officials encourage the reporting of unusual case presentations, clusters, or outbreaks, as well as any case in which the causal agent cannot be readily identified. Surveillance systems have maintained the capacity to identify clusters and increased patient volumes around a specific agent. Public health officials have noted an increase in the number of cases and thereby have issued a number of alerts. In New York State, there have been more than a dozen children with confirmed EV-D68 infections. These cases have been located in the capital and central regions of the state. Hospitals in Connecticut have also reported treating a few suspected cases.

EV-D68 is a virus that causes illness in the respiratory system. The virus is thought to be transmitted through respiratory secretions, including the saliva, nasal mucosa, and sputum, and spread when an infected person coughs, sneezes, or touches a contaminated surface -- much like the common cold. Most EV-D68 infections are self-limiting and cause only mild illness; however, some develop into severe disease, specifically in those patients with naïve or compromised immune systems. Non-polio enteroviruses are common. Most occur during the summer and fall months. Symptoms include typical cold symptoms such as fever, cough, and malaise. In severe cases respiratory illness, shortness of breath, febrile rash, aseptic meningitis or encephalitis can also occur.

The NYC Department of Health and Mental Hygiene is monitoring admissions to detect changes in children admitted in New York City for asthma or influenza like illness. EV-D68 should be considered in the differential for any child or teenager admitted with respiratory symptoms. Other viruses circulating at this time include the rhinovirus, other enteroviruses, and influenza.

EV-D68 is treated with supportive and symptomatic therapy, and there is no vaccine available at this time. Prevention can be achieved through traditional methods that include the following:

- Wash hands often with soap and water for at least 20 seconds, especially after changing diapers.
- Avoid touching eyes, nose, and mouths with unwashed hands.
- Avoid kissing, hugging, and sharing cups or eating utensils with people who are ill.
- Cover mouths and noses when coughing.
- Disinfect frequently commonly touched surfaces, especially when someone is ill.

EV-D68 is closely related to the rhinovirus, and many testing kits often cannot distinguish between the two. According to the New York State Department of Health (NYSDOH) and the New York City Department of Health and Mental Hygiene, testing kits designed specifically to detect EV-D68 are commercially available. Laboratory testing of respiratory specimens should be considered when the cause of infection in severely ill patients is unclear. Infection with enteroviruses can be identified by virus culture, immunoflourescent staining, or reverse transcription polymerase chain reaction (RT-PCR). Facilities can send specimens to laboratories though normal internal procedures. It is recommended that clinicians refer to the NYSDOH Wadsworth Center Virology Laboratory any case meeting the following criteria:

- Hospitalized pediatric patients with respiratory illness suspected to be due to EV-D68.
- Suspected EV-D68 cases presenting with atypical or unexpected manifestations.
- Suspected cases associated with respiratory outbreaks occurring in long term care facilities or other residential settings where no other etiology has been identified.

Clinical providers may report unusual cases or clusters to their local health departments. If you cannot reach your local health department, contact the NYSDOH Bureau of Communicable Disease Control at 518-473-4439 during business hours. In the off hours, contact the NYSDOH Public Health Duty Officer at 1-866-881-2809. In New York City, providers may contact the NYC Health Department at 1-866-692-3641.

To access the New York City DOHMH Health Advisory, please click here.

For more information regarding Enterovirus D68, please <u>click here</u>.