

NEW Directions

in Emergency Preparedness



Biosurveillance Update

West Nile Virus Update

According to the Centers for Disease Control in Atlanta, Georgia, there have been an additional 400 cases of West Nile Virus reported to federal public health officials as of September 25, 2012, bringing the total number of cases for 2012 to 3,545. About half of these cases presented in the neuroinvasive form, which can lead to the development of meningitis and encephalitis.

The early summer drought, aggressive spraying for mosquitoes and relatively cool temperatures this fall have helped to curtail the spread of the disease in New York State. Although outbreaks are unpredictable, hot temperatures and increased rainfall can trigger conditions that may increase the number of transmissions. Certain ecological factors, such as a decrease in predatory bird and bat population and increases in egg laying locations, can increase mosquito populations, even into the fall. Health centers are reminded to watch for this unpredictable disease and to promptly report cases to the appropriate public health agencies.

Influenza Update

- **H3N2v**

Since July 2012, there have been 305 cases of the influenza A (H3N2)v virus containing the influenza A (H1N1)pdm09 M gene reported to public health officials. Of these cases, there have been 11 hospitalizations and 1 death, although the decedent was reported to also have an infection with *P. aeruginosa* and that bacteremia did contribute to the death. Of the hospitalized cases, 10 of the 11 were children under the age of 5 years, all with light illness. Only one case, the decedent, was reported to have had severe illness.

Clinicians are reminded that this year's seasonal influenza vaccine does not contain the H3N2v, and rapid tests do not detect it. Specific testing for H3N2 is available at NYS DOH laboratories and the CDC. The CDC recommendation for hospitalized patients is empiric antiviral treatment for 5 days, with oral oseltamivir or inhaled zanamivir as soon after symptom onset as possible. This protocol is also recommended for outpatients at high risk of developing complications. Clinicians are also reminded that children under the age of 10 are serologically vulnerable due to the lack of cross protective antibodies.

Public health officials recommend that clinicians continue to advise their vulnerable patients to not attend state and local fairs where pigs may be present, as this virus appears to be a zoonotic infection. Pigs are often asymptomatic, and a sick animal can transmit the virus to humans. For more information on the H3N2v outbreak, visit the CDC website at www.cdc.gov or www.flu.gov.

- **Seasonal Influenza**

According to the World Health Organization's Influenza Surveillance and Monitoring report, the trivalent vaccine for the 2012-2013 influenza season in the northern hemisphere contains the Influenza A (H1N1) pdm09-like virus, the Influenza A/Victoria/361/H3N2 like virus (not to be

confused with the H3N2 virus transmitted by swine and those with pig contact), and the Influenza B/Wisconsin 1/2010 like virus. The quadrivalent vaccine contains the above three viruses as well as the Influenzaq B/Brisbane/60/2008 like virus.

Thus far, seasonal influenza transmission in the northern hemisphere has not yet increased greatly. The southern hemisphere is reporting decreasing levels of transmission. Countries in the tropical zones have seen low or decreasing levels of transmission.

Measles Outbreak – Dutchess and Ulster County, NY

A student at the Mountain Laurel Waldorf School in New Paltz, NY has contracted measles. The Department of Health in Dutchess County (DCDOH) has identified that a number of students at this school were not vaccinated and may contract the disease due to contact with the sick child. The DCDOH has advised that all persons who have had contact with the school or individuals at the school should check their vaccine and titer status. The incubation period for the index case stretches from September 24th to October 5th.

Recently, outbreaks of mumps and measles have been reported in the Hudson Valley and the Catskill region. The increase in identified cases has been attributed to a larger number of individuals who have traveled internationally to locations where measles and mumps may be prevalent, or to people living in countries with different vaccination requirements who have traveled to the U.S. As a result, there is an increased effort to spread the word about vaccination for childhood diseases and to inform the public about individuals who may not be immune due to their age or number of boosters. The CDC currently recommends that individuals born after 1957 who have not had two MMR vaccinations check their titers and get boosters if needed.

Clinicians are advised to draw an acute serum specimen at initial contact with each suspected case and to ensure that all suspect cases have both serology and viral cultures. Also, clinicians are reminded that up to 30% of IgM tests performed in the first 72 hours after rash onset may be falsely negative. Any negative result of a suspected case should be repeated, and patients should be tested for IgG as well. Public health officials have requested that all positive IgM results be forwarded to local public health laboratories for confirmation. A convalescent serum specimen should be drawn 14-30 days after symptom onset for comparison or confirmation.

Health centers should call the NYSDOH Bureau of Immunization at 518-473-4437 prior to specimen shipment to obtain shipping and packaging information. Shipments should be sent by overnight mail. Specimens should be packaged in a Styrofoam mailing box with 2 or more gel cold packs to maintain refrigeration.

Please check with your local and state department of health for more information on this outbreak or for information on testing and/or shipping requirements.