

August 12, 2011

**TO: Healthcare Providers, Hospitals, Local Health Departments**  
**FROM: NYSDOH Bureau of Communicable Disease Control**

**HEALTH ADVISORY:**

**HUMAN CASE OF EASTERN EQUINE ENCEPHALITIS**

**Please distribute immediately to the Infection Control Department, Emergency Department, Infectious Disease Department, Director of Nursing, Medical Director, Laboratory Service, and all patient care areas.**

**SUMMARY**

- The New York State Department of Health (NYSDOH) is advising physicians to be aware of high levels of arboviral activity in New York State (NYS). The mosquito season is traditionally defined as continuing through November 1.
- Providers should consider arboviral infections in their differential diagnosis and immediately report to the local health department (LHD) by telephone any patient with clinical evidence of viral encephalitis or viral meningitis.
- On August 12, the NYSDOH confirmed a positive human case of eastern equine encephalitis (EEE) in a resident of Oswego County. EEE is a rare but often fatal viral disease spread by mosquitoes.
- EEE virus has been detected in several mosquito pools collected in Oswego and Oneida Counties. Horses in these two counties have also tested positive for EEE virus this year.
- Wadsworth Center, the state public health laboratory, provides testing on both cerebrospinal fluid (CSF) and serum. The tests performed will vary with the clinical status of the patient.

**BACKGROUND**

EEE is regarded as one of the most serious mosquito-borne diseases in the United States (US) because of its high mortality rate. Since 2005, there have been 13 states with documented EEE virus activity and five have reported human EEE cases.

In recent years, NYS has seen an increase in EEE activity throughout the state. In 2009, the first confirmed human case of EEE in more than 25 years occurred in Oswego County, with a second case reported in an Onondaga County resident in 2010.

The NYSDOH and LHDs are enhancing surveillance for suspected EEE infections to facilitate the prompt recognition of human cases. A critical component of this effort is the rapid detection and timely reporting of patients with viral encephalitis and viral meningitis.

## **REPORTING CASES OF VIRAL ENCEPHALITIS AND VIRAL MENINGITIS**

During the mosquito season, providers should *report immediately* by telephone to their LHD any patient with clinical evidence of viral encephalitis or viral meningitis. For the remainder of the year, viral encephalitis and viral meningitis are still reportable, but immediate notification is not required.

## **TESTING AND COLLECTION OF SPECIMENS**

Wadsworth Center offers testing for EEE on both serum and CSF. CSF testing by polymerase chain reaction may be less sensitive than testing serum by serology because viral nucleic acid is shorter-lived in the infected individual. Therefore, ideally, both CSF and acute/convalescent serum specimens should be submitted for EEE testing. Providers who have a patient hospitalized with viral encephalitis or viral meningitis should contact their LHD to arrange testing.

Instructions on the collection and submission of clinical specimens and a detailed algorithm about which tests will be conducted on submitted specimens, and the Viral Encephalitis/Meningitis Case Report and History Forms can be found on the Wadsworth Center website at:

<http://www.wadsworth.org/divisions/infdis/enceph/form.htm>

## **ADDITIONAL INFORMATION**

Additional information on EEE can be found on the NYSDOH public website at:

[http://www.health.state.ny.us/diseases/communicable/eastern\\_equine\\_encephalitis/fact\\_sheet.htm](http://www.health.state.ny.us/diseases/communicable/eastern_equine_encephalitis/fact_sheet.htm).

If you have any questions regarding this information, please contact your LHD or the NYSDOH Bureau of Communicable Disease Control at (518) 473-4439.