



County of Erie

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HEALTH ADVISORY # 295 TESTING AND REPORTING OF ARBOVIRAL ILLNESSES

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Please distribute to the Healthcare Providers, Infection Control Department, Emergency Department, Employee Health Service, Infectious Disease Department, Director of Nursing, Medical Director, Laboratory Service, and all patient care areas.

Due to the recent report of 43 West Nile virus-positive [WNV(+)] mosquito pools in Erie County, the Erie County Department of Health (ECDOH) is reminding physicians and health care facilities of the procedures to test and report suspected cases of mosquito-borne arboviral illnesses, including WNV.

SUMMARY

- In 2012 to date, 43 WNV(+) mosquito pools (samples of adult mosquitoes) have been documented in Erie County, a marked increase in the number of WNV(+) mosquito pools reported in previous years.
- All mosquito pools consisted of *Culex pipiens* and/or *Culex restuans*, known to bite people especially during the evening or when abundant. The mosquitoes infected with WNV are present in the area and can potentially transmit the virus to humans.
- During the mosquito season, health care providers should consider arboviral infections in the differential diagnosis of any patient with clinical evidence of viral encephalitis or viral meningitis.
- All cases of suspected viral encephalitis should be reported immediately to the local health department (LHD) of the patient's county of residence.
- Wadsworth Center, the NYSDOH public health laboratory, provides testing for a number of domestic, exotic, common and rare viruses. Health care providers should contact the LHD prior to submission of specimens.
- Providers are encouraged to consider submitting specimens to Wadsworth Center for testing if clinical illness is consistent with mosquito-borne disease.

BACKGROUND

Mosquito-borne (arboviral) diseases, such as WNV, continue to occur annually in NYS. WNV continues to be detected across NYS, occasionally resulting in human fatalities. In partnership with the ECDOH, NYSDOH continues to conduct surveillance activities for WNV; a critical component of these efforts is the rapid detection and timely reporting of cases of viral encephalitis and viral meningitis by medical providers. In 2012 to date, 43 WNV(+) mosquito pools (samples of adult mosquitoes) have been documented in Erie County. This number represents a marked increase in the number of WNV(+) mosquito pools reported through late July in previous years. All pools consisted of *Culex pipiens* and/or *Culex restuans*. Although these species of mosquitoes primarily feed on birds, they are known to bite

people especially during the evening or when abundant. The report of 43 WNV(+) pools of *Culex pipiens-restuans* in Erie County indicates that mosquitoes infected with WNV are present in the area and can potentially transmit the virus to humans.\

REPORTING CASES OF ARBOVIRAL OR TICKBORNE ILLNESS

During the mosquito season, health care providers should consider arboviral infections in the differential diagnosis of any adult or pediatric patient with clinical evidence of viral encephalitis or viral meningitis.

Under NYS Public Health Law 2102 and 10NYCRR 2.10, health care providers should ***immediately report*** by telephone any adult or pediatric patient with clinical evidence of viral encephalitis. The report should be made to the LHD of the patient's county of residence. During mosquito season, although immediate notification of viral meningitis is not required under Public Health Law, providers are strongly encouraged to report suspected cases of viral meningitis to the LHD as soon after diagnosis as possible.

TESTING AND COLLECTION OF SPECIMENS

Wadsworth Center, the NYSDOH public health laboratory, offers testing for several arboviruses including WNV. Cerebrospinal fluid (CSF) testing by polymerase chain reaction (PCR) may be less sensitive than testing serum by serology. Therefore, ideally, both CSF and acute/convalescent serum specimens should be submitted for testing. Convalescent specimens should be drawn at least 3 weeks after acute specimens.

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>.

Providers are encouraged to consider submitting specimens to Wadsworth Center for testing if clinical illness is consistent with mosquito-borne disease, even if commercial laboratory testing is inconclusive or negative.

ADDITIONAL INFORMATION

Additional information on mosquito-borne diseases can be found at:

<http://www2.erie.gov/health/index.php?q=west-nile-virus>

Information on communicable disease reporting, including the list of reportable diseases, reporting guidance, and contact information for the Erie County Health Department and other local health departments, can be found at:

<http://www.health.ny.gov/professionals/diseases/reporting/communicable/>

If you have questions regarding this information, please contact the ECDOH Epidemiology and Surveillance Program at 716-858-7697 (Monday - Friday 8:30AM – 3:30PM).

Health Category Definitions:

Health Alert FLASH: conveys the highest level of importance due to a large-scale, catastrophic public health emergency; warrants immediate action or attention

Health Alert Priority: conveys the highest level of importance; warrants immediate action or attention to a health problem or situation

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; no immediate action necessary

The Erie County Department of Health does not provide medical advice. The information provided on the Erie County Department of Health website is not an attempt to practice medicine and is not intended as a substitute for professional medical advice, diagnosis, or treatment. It is for informational purposes only. Always seek the advice of your personal physician or other qualified health provider with any questions you may have regarding a medical condition or issue. Never disregard professional medical advice or delay in seeking it because of the content found on the Erie County Department of Health website or this correspondence.

The ECDOH Health Alert & Advisory System is an e-mail notification system designed to alert community partners about important health related information. You can sign up to receive alerts & advisories at <http://www2.erie.gov/health/index.php?q=node/59>.