2015 DOHMH Advisory 27: First Human Case of West Nile Viral Disease in NYC in 2015
August 16, 2015

Please distribute to staff in the Departments of Critical Care, Emergency Medicine, Family Medicine, Infection Control, Infectious Disease, Internal Medicine, Laboratory Medicine, Nursing, Neurology, Obstetrics and Gynecology, Oncology and Pediatrics

A Brooklyn man diagnosed with viral meningitis has been identified as the first reported case of West Nile viral infection in a NYC resident in 2015. West Nile virus has been found in mosquito pools in all boroughs in New York City (NYC). Advise patients, especially adults 60 years and older or persons with weakened immune systems, to protect themselves from mosquito bites (see below).

• West Nile viral disease should be suspected in patients presenting with viral meningitis or encephalitis, acute flaccid paralysis, and/or symptoms compatible with West Nile fever.

• The most sensitive screening test for West Nile virus in humans is IgM enzyme immunoassay (EIA) on cerebrospinal fluid and/or serum. Real time polymerase chain reaction (RT-PCR) testing, while confirmatory, is less sensitive.

• Commercial serologic and RT-PCR testing for West Nile virus is now widely available. The DOHMH Public Health Laboratory NO LONGER OFFERS routine West Nile virus testing services.

• Report all cases of encephalitis and West Nile virus or any other arboviral infection with laboratory evidence of current or recent infection in NYC to the Health Department.

Dear Colleagues,

We are writing to alert you that West Nile viral activity continues to increase in New York City in mosquitoes. The first human case of West Nile viral disease was identified in a Brooklyn man. West Nile virus positive mosquito pools have been identified in all five boroughs.

(1) First human case of West Nile viral disease identified in NYC
The case was a male over age 60 years from Brooklyn who was diagnosed with viral meningitis. The onset date was approximately August 1, 2015. The patient has since been discharged. As of August 11, 141 human cases of West Nile viral disease have been reported this year nationally. This number includes 82 neuroinvasive cases and 3 deaths.

(2) West Nile virus has been detected in 379 mosquito pools from five NYC boroughs.
West Nile virus has been identified in 379 mosquito pools collected primarily in Queens (159) and Staten Island (132), as well as Brooklyn (64), the Bronx (22) and Manhattan (2). The DOHMH has increased mosquito surveillance and larviciding in areas with new or persistent West Nile viral activity, and has conducted adulticiding activities in localized areas where persistently high levels of West Nile viral activity have been detected in mosquitoes.
Providers should advise their patients, especially those 60 years of age and older or persons with weakened immune systems, to protect themselves from mosquito bites. With West Nile viral activity continuing to increase in mosquitoes in NYC and surrounding areas, health care providers should advise persons, especially adults 60 years of age and older or persons with weakened immune systems, that West Nile virus is present in NYC, and to take measures immediately to protect themselves from mosquito bites. Prevention measures can include:

- wearing protective clothing when outdoors from dusk to dawn,
- use of mosquito repellents,
- ensuring household screens are in good repair, and
- eliminating standing water where mosquitoes can breed.

Report any patients with positive WN virus IgM and/or PCR/NAT tests, and all cases of encephalitis.

Encephalitis should be reported routinely throughout the year, as required by law. Arboviral infections, including West Nile virus, with laboratory evidence of recent or current infection should also be reported immediately, as required by law. During business hours, fax the completed Universal Reporting Form to 347-396-2632, or call 347-396-2600, OR report via the electronic Universal Reporting Form. Both are accessible on line at: http://www.nyc.gov/html/doh/html/hcp/hcp-urf.shtml.
Please call the Provider Access Line at 1-866-692-3641 with any questions you may have about human surveillance and testing for West Nile virus. If you have questions related to packaging specimens for shipment to the Wadsworth Center for the viral encephalitis PCR panel, please call either the Wadsworth Center’s Viral Encephalitis Laboratory at 518-474-4177 (ask for Viral Encephalitis Lab) or the NYC Public Health Laboratory’s Virology Section at 212-447-2864.

As always, we appreciate the ongoing cooperation of the medical provider community. Your vigilance in identifying and testing suspect cases is an important part of the DOHMH’s West Nile virus surveillance and control program. Laboratory-confirmed cases of West Nile viral disease identified and reported by the medical and laboratory community help to inform our mosquito control efforts. The successful detection and control of West Nile virus in NYC has been due in large part to our ongoing excellent partnership with the city’s medical and laboratory communities. Thank you for your continuing efforts.

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**On Line Resources:**

3. New York State Department of Health forms and instructions for specimen submission, including Collection and Submission of Specimens for Viral Encephalitis Testing Instructions (June 2010 version), Infectious Diseases Requisition Form, and Viral Encephalitis/Meningitis Case Report Form can be downloaded from http://www.wadsworth.org/divisions/infdis/enceph/form.htm.
4. For information on recent activity, personal precautions and larviciding and adulticiding schedules www.nyc.gov/health/wnv