2016 DOHMH Advisory  #43:
First Human Case of West Nile Viral Disease in NYC in 2016

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 encephalitis has been identified as the first reported case of West Nile viral infection in a NYC resident in 2016.
- 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.
- 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. Providers ordering real time polymerase chain reaction (RT-PCR) testing on serum and/or CSF should also order serologic testing.

September 12, 2016

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
A male over the age of 40 from Brooklyn was diagnosed with encephalitis due to West Nile Virus. The patient has underlying medical conditions. This first human case of West Nile in NYC was identified about 2 weeks later in the season compared to previous years. Across the United States, a total of 537 cases of West Nile viral disease have been reported this year (as of September 6, 2016), including 264 neuroinvasive cases and 14 deaths.

(2) West Nile virus has been detected in 242 mosquito pools from five NYC boroughs.
West Nile virus has been identified in 242 mosquito pools, including: Queens (110), Staten Island (73), Brooklyn (31), the Bronx (16), and Manhattan (12). The Health Department 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.
(3) 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 present 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,
- using mosquito repellents,
- ensuring household screens are in good repair, and
- eliminating standing water where mosquitoes can breed.

(4) 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 the Provider Access Line at 1-866-692-3641, OR report via the electronic Universal Reporting Form. Both are accessible on line at:

http://www1.nyc.gov/site/doh/providers/reporting-and-services/reporting-central.page
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 or view our WNV Testing and Reporting guidelines online (see link below).

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. 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:**


2. 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/programs/id/virology/services/encephalitis](http://www.wadsworth.org/programs/id/virology/services/encephalitis).

3. For information on recent activity, personal precautions and larviciding and adulticiding schedules [http://www1.nyc.gov/site/doh/health/health-topics/west-nile-virus.page](http://www1.nyc.gov/site/doh/health/health-topics/west-nile-virus.page)