



**DALLAS COUNTY
DEPARTMENT OF HEALTH AND HUMAN SERVICES
EPIDEMIOLOGY**

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To: Dallas County Medical Providers

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HEALTH ADVISORY (2): West Nile Virus

Dallas County Health and Human Services (DCHHS) is reporting a rapid rate of increase in West Nile virus-infected mosquitos in Dallas County, over the past 2 weeks. The virus is being detected in *Culex quinquefasciatus* mosquitoes, the primary vectors transmitting WNV to humans in our area, over a wide geographic distribution. The abundance of this species of mosquitoes has been relatively high following recent weeks of rainfall. Although no confirmed human cases of WNV infection have yet been reported this year in Dallas, the preliminary mosquito vector index for the week ending July 2nd was 0.51, which meets thresholds of WNV activity which have been historically associated with large WNV epidemics of human illness locally.

Given the increasing risks of WNV transmission, clinicians should continue to consider WNV disease in persons with symptoms consistent with **West Nile fever** (e.g. fever with headache, myalgia, arthralgia, weakness, or rash) or **West Nile neuroinvasive disease** (e.g. fever with aseptic meningitis, encephalitis, or acute flaccid paralysis).

DCHHS is reminding medical providers to send laboratory testing in all patients with clinically compatible symptoms of WNV disease. The typical incubation period for WNV is 3-14 days. Laboratory diagnosis is usually accomplished by testing serum for **WNV-specific IgM** by enzyme immunoassays (EIA), which are commercially available. WNV IgM antibodies are usually detectable by 3-8 days after illness onset. In patients with suspected West Nile neuroinvasive disease, additional tests should be considered from cerebrospinal fluid (CSF): (1) WNV-specific IgM in CSF, and (2) panel for IgM and IgG antibodies for other endemic arboviruses from CSF. PCR testing for WNV can be performed on CSF or serum specimens that are collected early in the course of illness and can confirm infection, if results are positive.

Patients at higher risk of severe disease, including those over 50 years of age or with immune-suppression (e.g., organ transplantation, chemotherapy, dialysis, HIV infection), **should be reminded to take particular preventive measures to avoid mosquito exposures, including wearing long sleeves and pants when outside and using EPA-registered repellants such as DEET.**

Active public health surveillance for WNV in mosquitoes and humans is ongoing through this season. Additional health advisories will be issued when human WNV infections begin to be reported. Please report suspected WNV cases as soon as possible by fax to DCHHS at (214) 819-1933. For questions or consultation please contact DCHHS at (214) 819-2004. The most recent weekly DCHHS Arbovirus Surveillance Reports are accessible at: www.dallascounty.org/department/hhs/westnile.html. Information about WNV is available from CDC at: www.cdc.gov/ncidod/dvbid/westnile/index.htm.