



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

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From: DCHHS Acute Communicable Disease Epidemiology

To: Dallas County Medical Providers

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HEALTH ADVISORY (2): West Nile Virus

Dallas County Health and Human Services (DCHHS) is reporting the first human case of West Nile infection confirmed in Dallas County for this 2021 season. The resident of zip code 75231 was diagnosed with West Nile neuroinvasive disease. West Nile virus (WNV) is currently being detected in *Culex quinquefasciatus* mosquitoes, the primary vectors transmitting WNV to humans in our area, over a wide geographic distribution. Although West Nile activity in mosquitoes has been increasing over the past 7 weeks, the vector index remains relatively low in comparison to previous years. DCHHS is monitoring these trends closely and will issue additional health advisories as needed. Human WNV cases historically begin increasing locally following significant increases in the weekly vector index.

Given the current risk 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. aseptic meningitis, encephalitis, acute flaccid paralysis, or other acute signs of central or peripheral neurologic dysfunction).

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.

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) 819-1949. The most recent weekly Dallas County Health and Human Services Arbovirus Surveillance Reports are accessible at: www.dallascounty.org/departments/dchhs/arbovirus-surveillance-report.php. Information about WNV is available from CDC at: www.cdc.gov/ncidod/dvbid/westnile/index.htm