



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

Zachary Thompson
Director

Dr. Christopher Perkins
Health Authority/ Medical Director

From: Kyoo Shim, MPH, Sonya Hughes, MPH, Epidemiology
Scott Sawlis, Rudy Philips, Environmental Health Services
Daniel Serinaldi, Laboratory Services
Wendy Chung, MD, Chief Epidemiologist

To: **Dallas County Medical Providers and Laboratory Staff**

Date: **April 13, 2017**

HEALTH ADVISORY: West Nile Virus

Dallas County Health and Human Services (DCHHS) is reporting confirmation of the first positive West Nile Virus (WNV) mosquito traps for 2017 in Dallas County, which were collected April 12th from 5 different traps in zip codes 75180, 75149 and 75150. The virus was identified by PCR testing of *Culex quinquefasciatus* mosquitoes, the primary vectors transmitting WNV to humans in our area. This is among the earliest seasonal appearances of WNV detected in mosquito populations in Dallas since environmental surveillance began in 2002. The abundance of this species of mosquitoes is currently higher than expected this early in the season. One adjacent county has also recently identified their first WNV positive mosquito trap for the season, indicating an early wide distribution of WNV in our local mosquito population. No confirmed human cases of WNV infection have yet been reported this year in Texas or Dallas County. **Reports of human cases typically begin locally in the weeks following the first identification of WNV from area *Cx. quinquefasciatus* mosquitoes.**

Clinicians should 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 be alert for cases of WNV disease, and to send laboratory testing in all patients with clinically compatible symptoms. 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. Additional health advisories will be issued if vector indices are noted to be significantly increasing, and when human WNV infections begin to be reported. Please report suspected WNV cases by fax to DCHHS at (214) 819-1933. For questions or consultation please contact DCHHS at (214) 819-2004. Information about WNV is available at: www.cdc.gov/ncidod/dvbid/westnile/index.htm.