West Nile Fever and Neuroinvasive Disease - Information for Clinicians

Please contact Leon County Health Department (CHD) by the next business day if you suspect West Nile virus infection to ensure prompt mosquito control efforts.

Transmission: West Nile virus is transmitted to humans primarily through the bites of infected mosquitoes. Other modes of transmission include blood transfusion and organ transplantation.

Incubation period: Two to 14 days.

Clinical presentation: The clinical spectrum for WNV infection includes asymptomatic infection or mild illness (fever and headache), aseptic meningitis, and encephalitis that can progress to coma and death. West Nile virus infection cases are often categorized into two primary groups: neuroinvasive disease and non-neuroinvasive disease. Approximately 80% of those infected show no clinical symptoms. Twenty percent have mild symptoms, and less than 1% experience the neuroinvasive form of illness.

Neuroinvasive disease such as aseptic meningitis, encephalitis, or acute flaccid paralysis (AFP). Symptoms include:

- Fever
- . Stiff neck
- Altered mental status
- Seizures
- Limb weakness
- Cerebrospinal fluid (CSF) pleocytosis
- Abnormal neuroimaging.

Non-neuroinvasive disease (e.g., West Nile fever). Symptoms include:

- Fever
- Headache
- Myalgias
- Arthralgias
- Rash
- Gastrointestinal symptoms

Patients at risk for severe disease:

Individuals over 60 years of age Immunosuppressed patients

Laboratory testing

Testing for WNV specific IgM antibodies should be requested for serum specimens or CSF. Leon CHD can provide guidance on how and when to submit samples to the Department of Health (DOH) Bureau of Public Health Laboratories.

Resources:

Leon County Health Department phone number: (850) 606-8125 DOH Bureau of Epidemiology: http://www.floridahealth.gov/diseases-and-conditions/mosquitoborne-diseases/index.html

Centers for Disease Control and Prevention: http://www.cdc.gov/westnile/index.html