



Public Health Advisory

Arboviruses Identified In Clark County Mosquito Pools June 14, 2017

Situation:

The Southern Nevada Health District (SNHD) has identified mosquitoes positive for West Nile virus (WNV) and Saint Louis Encephalitis virus (SLEV) in Clark County for the 2017 season. So far there has been one human case of WNV identified in 2017.

Persons infected with WNV or SLEV are most commonly asymptomatic or have a mild illness characterized by headache and fever. More severe disease presents with fever, headache, stiff neck, stupor, disorientation, coma, tremors, occasional convulsions (especially in infants), and spastic (but rarely flaccid) paralysis. The risk of severe disease is increased in very young, elderly, and immunocompromised populations. There is no vaccine or specific antiviral treatment for WNV or SLEV infection.

Serologic testing is the primary method for diagnosing WNV and SLEV infection. A rapid and accurate diagnosis of acute neuroinvasive disease can be made by detection of WNV or SLEV-specific IgM antibody in serum or CSF. These tests are available commercially. A positive IgM test result should be confirmed by plaque neutralization antibody testing (PRNT) which can be arranged through the Southern Nevada Health District Office of Epidemiology. Please see table below for commercial laboratory test information.

Table: Laboratory testing SLEV and WNV. Contact the testing laboratory for specimen collection, transport, and storage directions. Some laboratories only offer Arbovirus antibody panels which include testing for SLEV along with California Encephalitis, Eastern Equine Encephalitis, Western Equine Encephalitis, and West Nile viruses.

Laboratory Name	Test Code	Test Name
ARUP Laboratories	2001592	Arbovirus Antibodies, IgM, Serum
ARUP Laboratories	2001595	Arbovirus Antibodies, IgM, CSF
ARUP Laboratories	0050229	West Nile Virus RNA by RT-PCR
Clinical Pathology Laboratories (CPL)	3105	Arbovirus Antibodies, IgM, Serum
Clinical Pathology Laboratories (CPL)	4070	Arbovirus Antibodies, IgM, CSF
Quest Diagnostic Laboratories (must write "Use Focus test code" on test requisition)	40895 Focus	SLE virus antibody, IgG/IgM, Serum
Quest Diagnostic Laboratories (must write "Use Focus test code" on test requisition)	60895 Focus	SLE virus antibody, IgG/IgM, CSF
Quest Diagnostic Laboratories (must write "Use Focus test code" on test requisition)	2240 Focus	Arbovirus IgM antibodies, Serum (Does not include West Nile Virus)
Quest Diagnostic Laboratories	86788	West Nile Virus Antibody (IgM), Serum or CSF
Quest Diagnostic Laboratories	87798	West Nile Virus RNA, RT-PCR, Serum or CSF
LabCorp	138842	West Nile Virus Antibody, IgM, Serum
LabCorp	138966	West Nile Virus Antibody, IgM, CSF
LabCorp	140005	West Nile Virus RT PCR

Patient treatment for WNV or SLEV infection is supportive. Cerebrospinal fluid (CSF) studies in neuroinvasive disease demonstrate moderate, typically lymphocytic, pleocytosis. CSF protein is also elevated in 50% to 75% of cases. Computed tomography scans are usually normal and electroencephalographic results show generalized slowing without focal activity.

For Clinicians:

- ✓ Please include WNV or SLEV in your differential diagnoses
- ✓ In patients diagnosed with aseptic meningitis or encephalitis, consider ordering an Arbovirus panel on the CSF.
- ✓ Please report all WNV and SLEV disease cases to SNHD



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Health Alert: conveys the highest level of importance; warrants immediate action or attention

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

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Reference: <https://www.cdc.gov/sle/technical/fact.html>