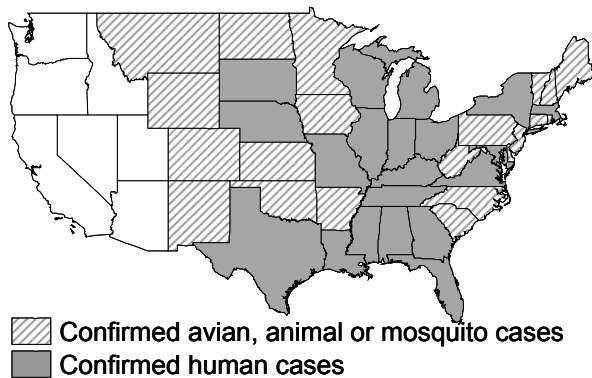


## West Nile Virus Update – August 2002

By: Katie Daley, BS

West Nile virus (WNV), which first emerged in the United States in 1999, continues to cause illness in both humans and other mammals. On July 8, 2002 the first human case of the year was detected in a Louisiana resident. Since then, the virus has spread westward and has been found in every state east of the Rocky Mountains. The farthest West that a human case has been reported to date is Texas, though equine cases have been identified as far west as Montana. Map 1 illustrates the progression of West Nile virus in the United States as of August 27, 2002.

**Map 1. Progression of West Nile Virus in the United States as of 8/27/02**



WNV primarily affects mosquitoes, birds, horses and humans, though it has been found in other mammals. WNV is transmitted to humans by the bite of an infected mosquito. Mosquitoes become infected when they feed on infected birds. Person-to-person transmission does not occur, nor is there evidence of human infection acquired from handling infected birds or animals.

There are 17 species of mosquitoes found in the greater Las Vegas area, at least three of which are potential vectors for WNV (*Culex pipiens*, *Aedes vexans*, and *Culex quinquefasciatus*). Clark County Vector Control is currently monitoring mosquito population activity, but is not conducting surveillance for WNV. The virus has not been identified in Nevada, and although mosquito populations are present, they are sparse. Therefore if a case of WNV is diagnosed

in Clark County, it is unlikely the infection was locally acquired.

Table 1 presents clinical information on WNV infection. Most people infected with the virus are asymptomatic or may have mild flu-like illness lasting several days. The symptoms of West Nile encephalitis resemble those of other forms of viral encephalitis seen in Nevada.

**Table 1. West Nile Virus Clinical Information**

Incubation	• 3-15 Days	
Symptoms of WNV Infection	<ul style="list-style-type: none"> <li>• Fever</li> <li>• Headache</li> <li>• Body Ache</li> <li>• Diarrhea</li> <li>• Vomiting</li> </ul>	<ul style="list-style-type: none"> <li>• Lymphadenopathy</li> <li>• Rash</li> <li>• Nausea</li> <li>• Eye Pain</li> </ul>
Symptoms of WNV Encephalitis (<1% of WNV Infections)	<ul style="list-style-type: none"> <li>• Neck Stiffness</li> <li>• Stupor</li> <li>• Coma</li> <li>• Paralysis</li> </ul>	<ul style="list-style-type: none"> <li>• Convulsions</li> <li>• Seizures</li> <li>• Muscle Weakness</li> <li>• Death (3-5%)</li> </ul>
Treatment	• Supportive	

If a physician suspects that a patient has been infected with WNV, it is important that a travel history be obtained to assess the patient's risk. The Centers for Disease Control (CDC) will conduct tests for the virus in highly suspect cases of encephalitis or meningitis. Such cases should be reported to the Office of Epidemiology at 383-1378 so that testing can be arranged. Analysis is most efficiently done through detection of IgM antibody in serum or CSF by MAC-ELISA. Physicians wishing to test other patients for WNV can contact their local laboratories for more information.

For your convenience, a West Nile virus FAQ sheet for patients is attached to this newsletter. The CDC's website is a useful resource and can be found at:

<http://www.cdc.gov/ncidod/dvbid/westnile>

