

Cameron Kaiser, M.D.
Public Health Officer

Susan D. Harrington, M.S., R.D.
Director, Dept. of Public Health

Public Health Advisory – West Nile Virus

April 22, 2014

SITUATION UPDATE

Warm weather season is here again, and along with the warmer weather comes the threat of West Nile Virus (WNV) infections. Last year in Riverside County there were 35 human cases and statewide there were 379 cases with 15 fatalities. Of the 35 Riverside cases 28 (80%) cases had neuroinvasive disease.

Currently, no WNV activity has been detected in Riverside County as of 4/22/14, but 12 WNV positive dead birds have been reported in 4 counties. While there are no human or equine cases in the state, one sentinel chicken flock has tested positive.

ACTIONS REQUESTED OF ALL CLINICIANS

The diagnosis of WNV infection is based on a high index of clinical suspicion and specific laboratory tests. We highly recommend clinicians test for WNV whenever there is a history of unexplained encephalitis, meningitis or unexplained febrile illness > 7 days especially if the fever is accompanied by a headache, rash, swollen lymph nodes, eye pain and nausea or vomiting.

What specimens are needed?

- Acute serum specimen (≥ 2 cc) and,
- If a lumbar puncture is performed, 1-2 CCs of cerebrospinal fluid are required for testing.
- Convalescent specimens may be requested

Questions about specimen submission should be directed to the County of Riverside Department of Public Health Laboratory by contacting: Megan Crumpler at (951) 358-5070.

Why test?

In 2010, a state record review of 4 hospitals in California found that an average of 80% of patients diagnosed with neuroinvasive disease went untested for WNV, including 80% of encephalitis patients. Testing differentiates WNV from other conditions (enterovirus, other arboviral diseases). Earlier diagnosis will assist with patient management, and may reduce the number of hospital days and associated costs. Vector control and public health agencies can institute proper control measures to prevent further cases.

Educate Patients about Prevention

- **DRAIN:** Mosquitoes lay their eggs on standing water. Young mosquitoes grow in the water. Get rid of standing water around the home. Empty water out of buckets, old tires, flower pots, and toys.
- **DEFEND:** Use an EPA-registered insect repellent with DEET, picaridin, IR3535 or oil of lemon eucalyptus in it. Put the repellent on skin that is not covered by clothes. Follow the directions carefully.
- **DUSK and DAWN:** Mosquitoes that transmit West Nile virus bite in the early morning and early evening hours, and sometimes throughout the night. When outside in the early morning or evening hours, wear long pants and a long sleeved shirt.

To report cases of WNV, please call (951) 358-5107 or fax your reports to (951) 358-5102.

Clinician Information is available at <http://www.westnile.ca.gov/resources.php>