



Riverside County  
Public Health

Disease Control Branch

Phone: (951)358-5107

Fax: (951) 358-5102

Susan D. Harrington, MS, R.D, Director  
Cameron Kaiser, MD, Public Health Officer

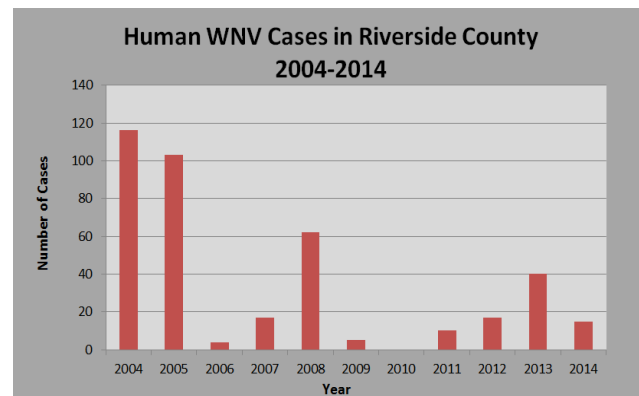
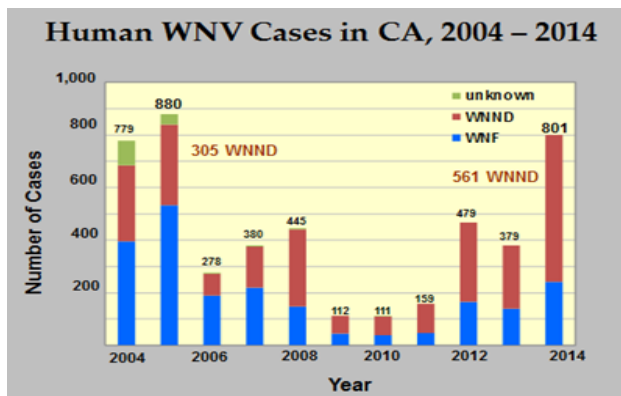
## Public Health Advisory

### West Nile Virus and Other Vector-Borne Diseases

#### May 21, 2015

#### SITUATION UPDATE

Warm weather season is here again, and along with the warmer weather comes the threat of West Nile Virus (WNV) infections. California reported 801 cases of WNV in 2014, compared to 379 cases in 2013. Locally, 15 and 40 WNV cases were reported in 2014, and 2013 respectively. WNV trends for the past ten years are reflected in the graphs below.



As of May 20, 2015, no human WNV cases have been reported in Riverside County or in California. However, seven mosquitoes samples in the Coachella Valley tested positive for WNV.

#### 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 ( $\geq 2$  CCs) and,
- If a lumbar puncture is performed, 1-2 CCs of cerebrospinal fluid are required for testing.
- Convalescent specimens may be requested

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

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

## **EMERGING VECTOR-BORNE DISEASES**

Although California experienced significant WNV activity in 2014, with 31 WNV related fatalities, it is important for clinicians to be alert to other Vector-Borne diseases.

Certain regions of Mexico and Latin America have experienced an increase in chikungunya cases and ongoing dengue infections. Both viruses are transmitted by *Aedes albopictus* and *Aedes aegypti* mosquitoes. These two mosquitoes are aggressive day biters which can potentially transmit the virus after biting an infected person. Although, these mosquitoes have not been identified yet in Riverside County, they have been identified in other California counties.

A map with the current detection sites can be found at:

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/AedesDistributionMap5-20-15.pdf>.

Currently, the risk of local chikungunya or dengue transmission in California is very low. Two probable and one confirmed chikungunya cases were identified in Riverside County in 2014. These individuals had traveled to regions with known virus transmission during their incubation period. Thus far in 2015, one confirmed and one probable case of dengue fever have been identified in Riverside County. Both cases are considered imported cases.

Information on the clinical presentations and laboratory diagnosis for chikungunya and dengue is posted at: <http://www.cdph.ca.gov/HealthInfo/discond/Documents/DengueorCHIKInformationForCliniciansinCA.pdf>

## **DISEASE REPORTING**

Suspect and confirmed cases of chikungunya and dengue should be reported to Disease Control immediately by calling (951) 358-5107 during regular business hours or (951) 782-2974 after-hours (request to speak with the Public Health second call Duty Officer).

WNV is reportable within one day of identification.

## **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. Much smaller quantities of water are needed for *Aedes albopictus* and *Aedes aegypti* mosquitoes to grow.
- **DEFEND:** Use an EPA-registered insect repellent with DEET, picaridin, IR3535 or oil of lemon eucalyptus. Apply to exposed skin or clothing (as directed on the product label).
- **DUSK & DAWN:** Mosquitoes that transmit WNV 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. It is important to note that *Aedes albopictus* and *Aedes aegypti* mosquitoes are aggressive day biters.