

To: CAHAN San Diego Participants

Date: July 7, 2025

From: Public Health Services

Health Advisory: Increased West Nile Virus detection in mosquitos, San Diego County

Key Messages

- West Nile Virus (WNV) has been detected in mosquitos in the Rolando area of San Diego County. WNV activity is
 elevated overall in California.
- As of June 30, no human cases have been detected in the County in 2025.
- WNV should be suspected in patients presenting with acute neurologic illness (e.g. aseptic meningitis, encephalitis, acute flaccid paralysis) and/or prolonged febrile illness.
- The preferred diagnostic test is WNV IgM serum antibodies and/or cerebrospinal fluid (CSF) IgM when a lumbar puncture is performed. Testing is widely available at commercial laboratories.
- Report all cases of encephalitis and meningitis to the San Diego County Epidemiology Unit, including those pending definitive diagnosis.

Situation

As of June 25, 2025, the California Department of Public Health (CDPH) reported increased West Nile Virus (WNV) activity in 13 counties including San Diego County. The County of San Diego (COSD) detected WNV in mosquitoes it collected on June 24, 2025 in the community of Rolando. Follow-up surveillance and testing revealed additional WNV-positive mosquitoes nearby, which necessitates the spraying for adult mosquitoes to reduce the risk of disease spread to people. No human cases of WNV have been reported in the County in 2025. There were two reported WNV cases among County residents in 2024 including one death. While human WNV infections are not detected every year in the County, periodic increases do occur, typically when there is increased WNV detection in mosquitos and dead birds.

Background

The WNV is transmitted to humans by mosquitoes, and there is no vaccine or medication to treat the disease. Most people infected with WNV will have no symptoms; however, about 1 in 5 people will develop a fever with other symptoms from 2 to 14 days after being infected, longer in immunocompromised persons. WNV can cause an acute febrile illness or neurologic disease, including meningitis, encephalitis, and acute flaccid myelitis. The overall fatality in persons with WNV neuroinvasive disease is approximately 10%, and long-term neurologic sequelae are common with encephalitis and acute flaccid myelitis. Most women known to have been infected with WNV during pregnancy have delivered infants without evidence of infection or clinical abnormalities. However, confirmed congenital WNV infection has occurred.

WNV disease should be suspected in patients presenting with viral meningitis or encephalitis, acute flaccid paralysis, or symptoms compatible with West Nile fever, particularly now through November. The most sensitive diagnostic test for WNV in humans is IgM enzyme immunoassay on cerebrospinal fluid or serum and available at most

commercial laboratories. PCR testing, while confirmatory, is less sensitive. However, it may be the best option for patients who are severely immunosuppressed and unable to mount a detectable immune response. For further information visit CDC's West Nile Virus Clinician Training.

Actions Requested

- 1) Review the CDC's West Nile Virus Clinician Training (free CME credit available).
- 2) **Suspect** WNV infection in patients presenting with aseptic meningitis, encephalitis, acute flaccid paralysis, and/or prolonged febrile illness.
- 3) **Advise** patients, especially adults ages 55 years and older and <u>persons with immunocompromise</u>, to protect themselves from mosquito bites.
- 4) **Report** all cases of encephalitis or any laboratory evidence of current or recent infection with WNV or any other arboviral infection to the San Diego County Epidemiology Unit by calling 619-692-8499 (8 am to 5 pm, Monday through Friday); 858-565-5255 (after hours and holidays).

Resources

Federal

Clinical Signs and Symptoms of West Nile Virus Disease | CDC

Clinical Testing and Diagnosis for West Nile Virus Disease | CDC

Treatment and Prevention of West Nile Virus Disease | CDC

Preventing Mosquito Bites | Mosquitoes | CDC

Risk and People Who Are Immunocompromised | Vector-Borne Diseases | CDC

<u>Interim Guidelines for the Evaluation of Infants Born to Mothers Infected with West Nile Virus During Pregnancy |</u>
MMWR

State

West Nile Surveillance and Prevention estnile.ca.gov | Westnile.ca.gov

Local

West Nile Virus | COSD

West Nile Virus Mosquito Activity and Bite Prevention | COSD

Thank you for your participation.

CAHAN San Diego

County of San Diego Health & Human Services Agency Epidemiology and Immunization Services Branch Phone: (619) 692-8499; Fax: (858) 715-6458

Urgent Phone for pm/weekends/holidays: (858) 565-5255

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Public Website: http://www.cahansandiego.com