



To: CAHAN San Diego Participants

Date: August 7, 2026

From: Public Health Services

Health Alert: Four West Nile Virus Infection Cases in San Diego County; New West Nile Virus Diagnostic

Key Messages

- Since June 5, 2026, four cases of West Nile virus (WNV) have been reported in San Diego County residents. This is compared to 2 cases total from January 1, 2023 through December 31, 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.
- California Department of Health (CDPH) has validated a new WNV diagnostic test with improved sensitivity and specificity for WNV through the Viral and Rickettsial Disease Laboratory (VRDL). The new assay requires whole blood, a specimen type not required for WNV testing in the past. SD Public Health Laboratory (PHL) will facilitate the send-out to VRDL.
- Report all cases of encephalitis and meningitis to the San Diego County Epidemiology Unit, including those pending definitive diagnosis.

Situation

From June 5 to July 14, 2026, San Diego County reported four human West Nile virus (WNV) cases; twice the total number seen in the previous three years and early in the mosquito season. One of the four cases this season was a neuroinvasive case that occurred in a healthy young adult. WNV activity in mosquitoes and dead birds has been elevated since June 2025 and increases in animal detections often precede rises in human cases. To strengthen diagnostic capacity, CDPH's VRDL has begun using whole blood PCR testing for WNV. Nationally, the Centers for Disease Control and Prevention ([CDC reported 48 human WNV cases](#)) in June 2026, far above the 10-year average, with [similar increases across California](#). Local human cases appear to be following this upward trend, as has occurred in past multiyear periods of higher transmission.

Background

WNV should be considered in patients with recent mosquito exposure in affected areas, especially where infected birds have been detected. Most infections are asymptomatic or mild, but severe diseases including meningitis, encephalitis, or acute flaccid paralysis can occur, particularly in older adults or those with certain medical conditions.

WNV Diagnostics

- Serology – serum WNV IgM and IgG, with CSF IgM when a lumbar puncture is performed. Because serum WNV IgM may be negative early in the course of disease, repeat serology may be indicated if initial testing was done within 8 days after the onset of illness.
- Other testing for WNV such as PCR testing on serum, CSF, or tissue as well as viral culture has been shown to have low sensitivity for detecting the virus. PCR has highest sensitivity within 3-5 days after infection and may be detected up to 8 days after onset.
- **Whole blood for RT-PCR** – this newly available test from CDPH's VRDL is replacing the now discontinued CSF PCR for WNV which has historically had low probability of detecting WNV.

- Whole blood in an EDTA lavender-topped tube (5 ml) should be collected, stored, and transported in refrigerated conditions only, and shipped within 14 days of collection. SD Public Health Laboratory (PHL) will facilitate the send-out to VRDL.
 - Specimens must be submitted with at least two unique identifiers (e.g., patient full name and date of birth)
- Submitting samples to VRDL requires approval by the County of San Diego's Epidemiology Unit.

Actions Requested

- 1) **Suspect** WNV infection in patients presenting with aseptic meningitis, encephalitis, acute flaccid paralysis, and/or prolonged febrile illness.
- 2) **Advise** patients, especially adults ages 55 years and older and [persons with immunocompromise](#), to protect themselves from mosquito bites.
- 3) **Consider** consulting the San Diego County Epidemiology Unit for approval of whole blood PCR testing at VRDL when appropriate.
- 4) **Report** all cases of meningitis and encephalitis, or any laboratory evidence of current or recent infection with WNV or any other arboviral infection to the Epidemiology Unit by calling 619-692-8499 (8 am to 5 pm, Monday through Friday); 858-565-5255 (after hours and holidays).

Resources

- [Clinical Signs and Symptoms of West Nile Virus Disease | CDC](#)
- [Treatment and Prevention of West Nile Virus Disease | CDC](#)
- [Interim Guidelines for the Evaluation of Infants Born to Mothers Infected with West Nile Virus During Pregnancy | MMWR](#)
- [Westnile.ca.gov | California West Nile Virus Website](#)
- [Health Advisory July 2025: Increased West Nile Virus detection in mosquitos, San Diego County | COSD](#)
- [West Nile Virus | COSD](#)
- [West Nile Virus Mosquito Activity and Bite Prevention | COSD](#)

Thank you for your participation.

CAHAN San Diego

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