

LAC DPH Health Advisory

Locally Acquired Case of Dengue in Los Angeles County October 15, 2025



This message is intended for emergency medicine, primary care, urgent care, internal medicine, and infectious disease providers.

Please distribute as appropriate.

Key Messages

- A case of locally acquired dengue has been detected in a resident of the San Gabriel Valley, Los Angeles County. This is the first case of locally acquired dengue reported in LA County this year.
- Providers should consider dengue in any patient with acute febrile illness and compatible symptoms, regardless of travel history.
- Providers should order appropriate diagnostic tests for all suspected dengue cases, using RT-PCR plus IgM, or NS1 antigen plus IgM, regardless of time since symptom onset.
- Providers must report any suspected cases of locally acquired dengue to Public Health immediately by phone. Travel-associated dengue virus infection must be reported within 1 working day from identification.

Situation

A case of locally acquired dengue has been identified in a resident of the San Gabriel Valley. The individual has no history of domestic or international travel. They became symptomatic at the end of September and are currently recovering.

The Los Angeles County Department of Public Health (LAC DPH) is working with the local vector control district to respond to the situation. The vector control district has increased mosquito trapping and monitoring activities and is conducting additional mosquito abatement to reduce the risk of further spread in the neighborhood.

This is the first case of locally acquired dengue reported in LA County in 2025. In 2024, a total of 14 locally transmitted dengue cases were identified in the county.

The overall risk of sustained local dengue transmission in LA County remains low. However, this case highlights that infected mosquitoes are present locally and underscores the importance of early recognition, reporting, and prevention to limit further spread.

Travel-associated dengue cases continue to be identified in LA County and across the U.S. Globally, many <u>countries</u> are reporting higher than usual numbers of dengue cases, which increases the likelihood of importation. With mosquitoes capable of transmitting dengue established in LA County and frequent travel-associated infections, sporadic local transmission continues to be a concern.

In LA County, peak mosquito season is during the warmer months of July through November, when the risk of local dengue transmission is greatest. Travel-associated cases, however, can occur year-round.

LAC DPH encourages healthcare providers to suspect and test for mosquito-borne diseases, to promptly report suspected cases, and to routinely discuss prevention strategies with patients and travelers.

Actions Requested of Providers

- Obtain a travel history in all patients presenting with acute febrile illness. Ask about a history of travel among household members as well.
- Consider dengue in any patient with acute febrile illness and recent travel (within 14 days prior to illness onset) to <u>areas with frequent or continuous dengue</u> <u>transmission</u>.
- Consider dengue in a patient without a history of travel if presenting with an acute febrile illness and strongly suggestive signs and symptoms of dengue (e.g., fever, thrombocytopenia, leukopenia, aches, pains, rash). (see Clinical Presentation below)
- Order appropriate diagnostic tests for acute dengue infection. Use either one of these dengue test combinations: 1) reverse transcription polymerase chain reaction [RT-PCR] test and an IgM antibody test or 2) a nonstructural protein 1 [NS1] antigen test and an IgM antibody test. These tests should be ordered regardless of time since symptom onset. Do not delay appropriate care while waiting for test results to confirm dengue. (see Laboratory Testing below)
- Report any patient suspected to have locally acquired dengue infection to Public Health immediately, and travel-associated infections within 1 working day from identification. (see Reporting below)
- Discuss the importance of mosquito bite prevention with patients and travelers. (see Prevention below)

Dengue Overview

Background

Dengue is an arbovirus infection caused by any of the four distinct but closely related dengue viruses (DENV-1, DENV-2, DENV-3, DENV-4). People can be infected with

dengue more than once due to the four different dengue viruses. Dengue is endemic in many tropical and subtropical regions <u>worldwide</u> and global incidence of dengue in 2024 has been the highest level on record.

Dengue is primarily transmitted to humans by the bite of an infected *Aedes* mosquito. Local transmission of dengue in the United States has been limited, with sporadic cases reported in Florida, Hawaii, Texas, and more recently Arizona and California.

Clinical Presentation

Dengue can range from asymptomatic infection or mild illness to severe disease. The typical incubation period is 5-7 days.

Approximately one in four patients develop symptoms and most commonly have a mild to moderate, nonspecific, acute febrile illness. Typical presentation includes acute onset fever accompanied by a combination of the following: headache, retro-orbital pain, myalgia, bone pain, arthralgia, nausea and vomiting, rash, a positive tourniquet test, and leukopenia.

Approximately one in twenty symptomatic patients develop life-threatening disease with severe bleeding, shock, and/or respiratory distress.

Warning signs of severe dengue usually appear as fever starts to decline, and include persistent vomiting, severe abdominal pain, fluid accumulation, mucosal bleeding, lethargy/restlessness, postural hypotension, liver enlargement, and progressive increase in hematocrit.

Persons at increased risk of severe dengue include those with a prior history of dengue infection, infants, older adults (≥ 65 years), pregnant women, and those with chronic medical conditions. A second infection with a different DENV virus from the first infection carries a higher risk of severe disease than the first, third or fourth infection, however any infection can lead to severe disease.

See CDC Clinical Features of Dengue for more details.

Laboratory Testing

All patients with suspected dengue should be tested with either one of these test combinations:

- A nucleic acid amplification test (NAAT) (e.g., RT-PCR) and an IgM antibody test OR
- An NS1 antigen test <u>and</u> an IgM antibody test.

These tests should be ordered regardless of the time from symptom onset, although the test sensitivity of RT-PCR and NS1 antigen tests decrease after the first 7 days. A serum sample is preferred for dengue testing.

IgG detection in a single serum sample should not be used to diagnose acute dengue because it does not distinguish between current and previous infection.

Testing for <u>West Nile virus</u>, a mosquito-borne virus endemic in LA County, should be obtained at the same time as dengue tests. West Nile can have a similar clinical presentation. In addition, cross-reactivity among arboviral antibody tests can result in false-positive test results.

These tests are available at commercial laboratories. If access to commercial testing is not available, testing can be conducted at LAC DPH Public Health Laboratory after obtaining approval from LAC DPH.

See CDC Clinical Testing Guidance for Dengue for more details.

Management

No specific antiviral treatment for dengue is available. Treatment is supportive and requires careful volume management. Appropriate triage, management, and follow-up remain the most effective interventions to reduce dengue morbidity and mortality.

Patients with mild symptoms should be advised to stay well hydrated and avoid aspirin and other nonsteroidal anti-inflammatory drugs (such as ibuprofen) because of their anticoagulant properties. Fever should be controlled with acetaminophen and tepid sponge baths.

For at least one week, patients should avoid mosquitoes and use insect repellent to prevent additional spread.

Patients with severe disease require hospitalization. Intravenous fluid therapy is the mainstay of supportive care. Close observation and frequent monitoring in an intensive care unit may be required. Prophylactic platelet transfusions and steroids are not recommended.

See CDC Treatment Recommendations and Dengue Case Management Pocket Guide.

Prevention

Preventing mosquito bites is the best way to prevent dengue and other mosquito-borne diseases. While there is an FDA-approved vaccine, it is only approved for children 9-16 years old with previous dengue infection and living in endemic areas. See CDC <u>Dengue Vaccine</u>.

Aedes mosquitoes bite during the day and night and live indoors and outdoors. The best way to prevent mosquito bites is to use insect repellent, wear loose-fitting, long-sleeved shirts and pants, and take steps to control mosquitoes in and around the home. Information for the public, including print resources (in English and Spanish) are available on the CDC Preventing Mosquito Bites webpage.

Patients can be referred to their local vector control district to report problems with mosquitoes and request assistance. Local vector control district by zip code can be found at www.socalmosquito.org.

See CDC Preventing Dengue.

Reporting

Healthcare providers must report any suspected **locally acquired dengue** to Public Health immediately by phone.

Los Angeles County DPH Acute Communicable Disease Control:

- Weekdays 8:30am-5pm: call 888-397-3993.
- After-hours: call 213-974-1234 and ask for the physician on call.

Long Beach Health and Human Services:

- Weekdays 8am-5pm: call 562-570-4302.
- After hours: call the duty officer at 562-500-5537.

Pasadena Public Health Department:

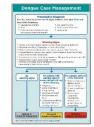
- Weekdays 8am-5pm: call 626-744-6089.
- After hours: call 626-744-6043.

Travel-associated dengue virus infection must be <u>reported to Public Health</u> within 1 working day from identification.

Additional Dengue Resources

CDC:

Dengue for healthcare providers
Clinical management pocket guide
Dengue general



LAC DPH:

Dengue--resources for the public and healthcare providers

CDPH:

Dengue home page

This communication was sent by Dr. Sharon Balter, Director, Acute Communicable Disease Control Program, Los Angeles County Department of Public Health.

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