



August 30, 2022

# Clinical Considerations for Dengue Virus Infection

Dengue is [endemic](#) in many popular travel destinations for U.S. travelers, such as the Caribbean. The Centers for Disease Control and Prevention (CDC) is monitoring ongoing dengue outbreaks occurring in [several regions](#) around the world. Because most dengue cases reported in the continental United States occur in travelers, CDC is advising clinicians to consider dengue in patients with a febrile illness who have traveled to dengue-endemic areas in the 2 weeks before symptom onset.

## Clinical Overview:

- To prevent dengue infection, travelers to dengue-endemic areas should protect themselves against [mosquito bites](#) by using [EPA-registered insect repellent](#), wearing long-sleeved shirts and long pants, and taking other protective measures while traveling.
- Dengue is usually a mild illness. However, in about 5% of cases, it can progress to severe disease with associated shock, severe bleeding, or organ impairment.
- Mortality for dengue can be as high as 13% in untreated patients. Common causes of death include unrecognized or prolonged shock, unrecognized hemorrhage, and secondary infections.
- Common [dengue symptoms](#) include fever, aches and pains (headache, retroorbital pain, myalgias, and arthralgias), nausea and vomiting, and rash or petechiae. Symptoms begin abruptly after an incubation period of 5 to 7 days. Fever can last between 2 to 7 days.

## Severe Dengue:

- Defervescence (the abatement of fever to body temperature below 38.0°C or 100.4°F) marks the beginning of the critical phase, which is when progression to severe dengue can occur and lasts 1 to 2 days.
- Clinicians should monitor closely for warning signs that can indicate progression to severe dengue. These patients should be evaluated for observation or inpatient management.
- Warning signs include persistent vomiting, severe abdominal pain, extravascular fluid accumulation (e.g., pleural effusion, ascites), mucosal bleeding, lethargy/restlessness, postural hypotension, liver enlargement, and a progressive increase in hematocrit (i.e., hemoconcentration).

## Testing and Treatment:

- Patients with symptoms consistent with dengue can be [tested](#) with nucleic acid amplification tests (NAAT) AND IgM antibody tests within 7 days of symptom onset. After 7 days from symptom onset, test only with IgM antibody tests.

- Dengue is a nationally notifiable disease in the United States. All suspected cases should be reported to the local health department.
- Intravenous (IV) fluid therapy and management of complications are the [mainstay of treatment](#). Management of hospitalized dengue patients requires frequent monitoring of vital signs and hematocrit levels to determine disease progression and appropriate response to fluid replacement therapy.
- There are currently no specific antivirals recommended for dengue treatment or vaccines available to protect people who are traveling. The FDA-approved [dengue vaccine](#) is only recommended for children living in areas where dengue is endemic, and not approved for travelers.

For more information, visit CDC's [dengue page for healthcare providers](#).

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