



## Ongoing Risk of Dengue Virus Infections and Updated Testing Recommendations

Date: March 21, 2025

**Public Health Message Type:**  Alert  Advisory  Update  Information

**Intended Audience:**  All public health partners  Healthcare providers  Infection preventionists  
 Local health departments  Schools/childcare centers  ACOs  
 Animal health professionals  Other: Clinical laboratories, county mosquito control agencies

### Key Points or Updates:

- The Centers for Disease Control and Prevention (CDC) issued a [Health Update](#) on March 18<sup>th</sup> on the ongoing risk of dengue virus (DENV) infections in the US due to elevated numbers of dengue cases in the Americas region. Spring and summer travel in the US overlaps with the months of increased seasonal dengue activity in many countries.
- Dengue is caused by four distinct but closely related dengue viruses or serotypes (DENV-1, -2, -3, and -4). Infection with one DENV usually induces lifelong immunity to that serotype and short-term immunity to other DENV serotypes for months to years.
- All four DENV serotypes were reported among travelers returning to the US in 2024. DENV-3 was the most common serotype identified in 2024, but the proportion of cases caused by DENV-4 has been increasing in recent months.
- Patients with suspected DENV infection should be tested with RT-PCR (i.e., a nucleic acid amplification test [NAAT]) or an NS1 ELISA test and an IgM antibody test. These tests can be considered regardless of the symptom onset date, although the sensitivity of RT-PCR and NS1 antigen tests decrease after the first 7 days of symptoms.
- Testing for other arboviruses that might be occurring in the location where the patient was likely exposed should be considered, e.g., Zika, chikungunya, and Oropouche.

### Action Items – Healthcare Providers:

- Review the CDC recommendations in the June [2024 HAN \(CDCHAN-00511\)](#).
- Maintain a high suspicion for DENV for patients with fever and travel to areas with DENV transmission in the 14 days before illness onset.
- If DENV is suspected, order RT-PCR AND IgM antibody tests OR NS1 antigen AND IgM antibody tests.
- Consider tests for other arboviruses, including Zika, chikungunya, and Oropouche.
- If commercial testing is not feasible (i.e., uninsured patients), to request public health testing, healthcare providers should complete the Arboviral Testing Request [worksheet](#) and send via encrypted e-mail to [CDSVectorTeam@doh.nj.gov](mailto:CDSVectorTeam@doh.nj.gov).
- Advise patients who plan to travel to areas where DENV is circulating to take steps to prevent mosquito bites during travel and for 3 weeks after returning.

### **Action Items - Local Health Departments**

- Consider using the new [job aid for reviewing dengue medical records](#) when reviewing data from medical records for case investigations.
- Initiate public health investigation within 2 days of notification and enter critical details (including travel history) into CDRSS within 5 days.
- Notify the CDS Vector-borne Disease Team via email ([CDSVectorTeam@doh.nj.gov](mailto:CDSVectorTeam@doh.nj.gov)) if the case does not have a recent travel history to an [area with DENV transmission](#).
- Notify your [county mosquito agency](#) of the positive case so that timely mosquito surveillance and control efforts can be performed.
- Educate travelers to areas with dengue transmission to prevent mosquito bites while traveling and for 3 weeks after returning to NJ.

### **Contact Information:**

- The CDS Vector-borne Disease Team, [CDSVectorTeam@doh.nj.gov](mailto:CDSVectorTeam@doh.nj.gov)

### **References and Resources:**

- [CDC: Dengue](#)
- [CDC Health Advisory “Ongoing Risk of Dengue Virus Infections and Updated Testing Recommendation in the United States”](#)
- [NJDOH Fight the Bite NJ!](#)
- [Travel-associated DENV Cases in NJ](#)