



## Reporting Criteria for Dengue fever

### (1) Definition

Infectious disease caused by dengue virus (DENV) a member of the family *Flaviviridae*.

### (2) Clinical manifestations

Dengue fever is characterized by sudden onset of high fever, headache, retro-orbital pain, facial flushing, and conjunctival injection that appear after an incubation of 2-15 days (mostly 3-7 days), followed by general myalgia, arthralgia and general malaise. Fever lasts for 2-7 days, often with two febrile phases. Three to four days after onset, rash develops on the trunk, which spreads to the extremities and the face. The patient generally recovers within 1 week. Severe leukopenia and thrombopenia may be observed. Dengue hemorrhagic fever\* is a severe form of the infection associated with bleeding and shock syndrome, which may require general care. Direct person-to-person transmission does not occur. Dengue fever is distributed widely in tropical and subtropical regions (e.g. Asia, Oceania and South & Central America). Many patients infected abroad are detected after developing signs or symptoms in Japan; no autochthonous infection in Japan had been reported until 2014.

\* Dengue hemorrhagic fever: The clinical course is quite similar to that of dengue fever, but after decline of fever, severe bleeding caused by plasma leakage and thrombopenia arise, which may result in death.

### (3) Reporting criteria

#### a) "Patients (confirmed cases)"

In compliance with Article 12 paragraph 1 of the Infectious Diseases Control Law, if a physician has examined a patient with clinical findings as described in (2), has suspected dengue fever, and has made a diagnosis of dengue fever based on the results obtained by the laboratory method and specimen as described below, the physician shall notify the case immediately.

If the patient meets all four of the following criteria, the physician shall notify the case as dengue hemorrhagic fever.

Criteria for dengue hemorrhagic fever	
Clinical sign	Fever lasting from 2-7 days (occasionally with two phases)
Increased vascular permeability	One or more of the following plasma leakage signs <ul style="list-style-type: none"><li>• Increase in hematocrit (<math>\geq 20\%</math> above average baseline for age following fluid replacement therapy)</li><li>• Shock</li><li>• Hypoproteinemia or pleural effusion/ascites</li></ul>

Thrombocytopenia	≤100,000 cells per mm <sup>3</sup>
Bleeding tendency	One or more of the following <ul style="list-style-type: none"> <li>• Positive tourniquet test</li> <li>• Petechiae; ecchymosis/purpura</li> <li>• Mucosa/gastrointestinal bleeding or bleeding from injection site and other sites</li> <li>• Blood in stool</li> </ul>

**b) “Asymptomatic infections”**

In compliance with Article 12 paragraph 1 of the Infectious Diseases Control Law, if a physician has examined an individual without clinical signs or symptoms listed in (2), but has diagnosed that the individual was a DENV infection based on the results obtained by the laboratory method and specimen as described below, the physician shall notify the case immediately.

**c) “Deceased individual whose death was attributed to DENV infection”**

In compliance with Article 12 paragraph 1 of the Infectious Diseases Control Law, if a physician has examined a deceased person with clinical signs and symptoms as described in (2), and, has diagnosed that the death was due to DENV infection based on the results obtained by the laboratory methods and specimens as described below, the physician shall notify the case immediately.

**d) “Deceased individual whose death was suspected to be due to DENV infection”**

In compliance with Article 12 paragraph 1 of the Infectious Diseases Control Law, if a physician has examined a deceased person with clinical signs and symptoms as described in (2) and has suspected that the death was caused by DENV infection, the physician shall notify the case immediately.

Laboratory method	Specimen
Detection of pathogens by isolation and identification	Blood
Detection of the pathogen’s genome by PCR	
Detection of non-structural protein (NS1) antigen	Serum
Detection of IgM (increase in antibody titer in paired serum specimens or positive seroconversion)	
Detection of antibody by means of neutralization test or hemagglutination inhibition test (increase in antibody titer in paired serum specimens or positive seroconversion)	