IASR
Infectious Agents Surveillance Report

## Reporting Criteria for Zika virus infection

### (1) Definition

Infectious disease caused by Zika virus, a member of the genus *Flavivirus* of the family *Flaviviridae*, which is transmitted mostly by *Aedes* species mosquitos.

### (2) Clinical signs and symptoms

- Zika virus disease

  Usually, after an incubation period of 2-12 days (mostly 2-7 days), illness begins with fever (<38.5°C in most cases) and rash, which may be accompanied by arthralgia, conjunctival injection, headache, retro-orbital pain, myalgia, or joint swelling. Most patients recover in a few days without severe consequences. Epidemiologically, the link to Guillain-Barré syndrome has been suspected though a causal relationship remains unclear.

- Congenital Zika virus infection

  Microcephaly, intracranial calcification or other congenital disorders may occur as a consequence of intrauterine transmission of Zika virus from the infected mother to the fetus.

### (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 signs or symptoms as described in (2), suspected Zika virus infection, and has made a diagnosis of Zika virus infection based on the results obtained by the laboratory method and specimen as described below, the physician shall notify the case immediately.

If diagnosis is made based on IgM antibody detection, it should be confirmed that the patient was not previously infected or co-infected by another flavivirus (e.g. Dengue fever, yellow fever, West Nile fever, Japanese encephalitis) circulating in the region where the patient was suspected to be infected by Zika infection and that the patient had not received yellow fever vaccine within the past 6 months. If the infection is suspected to be due to a previous infection or co-infection by another flavivirus, the laboratory diagnosis should rely on methods other than IgM antibody detection.

#### b) "Asymptomatic infections"

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

#### c) "Deceased person whose death was attributed to Zika virus 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 as described in (2), and, has diagnosed that the death was due to Zika virus infection based on the results obtained by the laboratory methods and specimens as described below, the physician shall notify the

case immediately.

**d) "Deceased person whose death was suspected to be due to zika virus 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 as described in (2) and has suspected that the death was caused by Zika virus infection, the physician shall notify the case immediately.

| Laboratory method | Specimen | |
|---|---|---|
| | Zika virus disease | Congenital Zika virus infection |
| Detection of the pathogen by isolation and identification | Blood, urine | Blood, umbilical cord, umbilical cord blood, placenta, urine, cerebrospinal fluid |
| Detection of the pathogen's genome by PCR | | |
| Detection of IgM | Serum | Serum, umbilical cord serum, cerebrospinal fluid |
| Detection of antibody by neutralization test | | |