



ALERT FOR CLINICIANS

Dengue fever risk for travellers to Bali and other high risk countries

KEY POINTS

- Bali, Indonesia is experiencing increased dengue fever cases, with a corresponding increase among Western Australian travellers to Bali.
- Advise travellers to Bali and other high-risk countries to [prevent mosquito bites](#).
- Consider dengue as a differential diagnosis of fever in a returned traveller from Bali or high-risk country.
- Request dengue serology, ideally within a week of symptom onset, or later if not possible. Note symptom onset, travel history and previous dengue infection on the pathology request form.
- Discuss case management with infectious diseases as needed. Notify dengue cases to public health.

Epidemiology

- Dengue virus is a flavivirus classified into four serotypes (DENV-1 to DENV-4), all capable of causing a spectrum of illness ranging from asymptomatic infection to serious disease.
- Transmission is via the bite of an infected *Aedes aegypti* mosquito, and to a lesser extent, *Aedes albopictus*.
- Dengue is endemic in more than 100 countries across South-East Asia, the Western Pacific region, the Americas and parts of Africa. It is found mostly in urban and semi-urban areas.
- A recent surge in global travel, increasing temperatures, high rainfall and changing distribution of mosquito vectors, has translated to an increase in dengue cases.
- Most cases reported in Western Australia are in returned travellers from Indonesia (usually Bali), followed by Thailand, India, Malaysia and Sri Lanka.

Clinical considerations

- Symptoms typically last 7 days and may include: fever, headache, retro-orbital pain, maculopapular rash, myalgia, fatigue, abnormal taste sensation, arthralgia, and anorexia.
- Symptom onset is 4 to 7 days after a person is bitten by an infected mosquito (range 3-14 days).
- 1-5% of patients will develop severe dengue or dengue haemorrhagic fever.
- Infection with one dengue serotype leads to lifelong immunity to that particular serotype; secondary infection with another serotype increases the risk of dengue haemorrhagic fever and severe disease.
- There is no specific treatment for dengue and care is largely supportive.
- [Mosquito bite prevention](#) is the best way to prevent dengue infection.
- The dengue vaccine is **not** recommended for short-term visits to dengue-endemic areas.

Testing

- Testing for dengue is advised in persons who have a clinically compatible illness and have travelled to an area with known dengue activity during the exposure period (3-14 days prior to onset of symptoms).
- NS1 antigen testing **and** serology are routinely performed on dengue requests.
- PCR testing can be performed on serology positive cases to determine the dengue virus serovar.
- Other useful tests include a full blood picture.
- Note symptom onset, travel history and previous dengue infection on the pathology request form.

Notification of cases

- Notify dengue cases using the communicable disease [notification form](#).
- For public health advice, phone your local [Public Health Unit](#) during office hours (8am-5pm Mon-Fri, excluding public holidays) or after hours call 08 9328 0553.

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