

# **Dengue information for travellers**

<u>Dengue</u> is a viral infection spread through the bites of infective mosquitoes.

#### **Transmission**

The most important vector of dengue virus is the tiny container-breeding mosquito *Aedes aegypti*, but related *Aedes* species such as *Aedes albopictus* can also transmit the virus. Only female mosquitoes take blood meals and transmit the infection in the process. The mosquitoes bite mainly in the early morning and late afternoon, both outdoors and indoors, and are day biters. After the mosquito has blood-fed on an infected person, the dengue virus replicates inside the mosquito and, 8–12 days later, the mosquito becomes infective for the rest of its life and is able to transmit the virus to multiple persons on whom it feeds. Even though the primary mode of transmission is between mosquito vectors and humans, there is the possibility of maternal transmission of the dengue virus from a pregnant woman to her unborn child and of passive transmission through blood transfusion.

#### Nature of the disease/clinical features

Most people infected with dengue virus will not show any clinical symptoms of disease; however, for those that do, symptoms usually start 4–10 days after the infective bite. The most common symptoms are high fever, severe headache, aches behind the eyes and joints, nausea and body rash. Those with dengue symptoms must rest, take plenty of fluids, and use acetaminophen (paracetamol) to relieve pain and reduce fever; they should avoid non-steroidal anti-inflammatory drugs (ibuprofen, aspirin). Most will get better within 1–2 weeks; however, after the fever has subsided, some persons may develop severe dengue, with symptoms such as severe abdominal pain, persistent vomiting, rapid breathing and bleeding of gums or nose. Severe dengue is a potentially fatal emergency that needs proper medical care in a hospital.

# **Geographical distribution**

Dengue is common in tropical and subtropical regions around the world, especially in the South-East Asia, Western Pacific, Eastern Mediterrean, African and Americas regions of the World Health Organization. It is spreading into new areas, including Europe. More than 130 countries are at risk of dengue every year.

### Risk for travellers

Risks for travellers are highest when visiting urban and semiurban areas in endemic countries, particularly those affected by ongoing outbreaks. Persons previously infected with one of the four dengue virus strains have a greater risk of developing severe dengue when infected again with the same or another strain.

# **Prophylaxis**

There are no specific prophylactic medicines against the dengue virus. Treatment is directed primarily at relieving pain symptoms and fluid management.

# **Precautions**

Avoiding mosquito bites, especially during the day when the mosquitoes are most active, can reduce the risk of infection with dengue virus. This includes wearing socks, long trousers and long sleeves, and applying mosquito repellents on exposed skin (containing diethyltoluamide, icaridin or ethyl butylacetylaminopropionate), and screening windows and doors and sleeping under mosquito nets (when resting during the day or for dengue patients admitted to health facilities) (1).

# Reference

1. <u>Dengue and severe dengue (who.int)</u>. In: WHO/Fact sheets. Geneva: World Health Organization; 2024.