

TRAVEL INFO: DENGUE

Dengue is the most frequent tropical arbovirolosis (infectious viral disease) and is transmitted by the *Aedes* mosquito. Dengue occurs in Southeast Asia, the Caribbean, Central America, the northern half of South America and also sporadically in Africa. The disease is now widespread in many tropical areas. In contrast to malaria, the disease occurs just as frequently in the towns as in the countryside. There are four different dengue viruses (i.e. 4 serotypes).

In its typical classical course the infection is characterised by a sudden onset with fever, headache and aching joints (dandy fever or breakbone fever) and significant muscle pain (including lumbar or lower back pain and pain around the eyes). There is sometimes a dry cough, and relative bradycardia (slow heartbeat). The disease often displays a biphasic pattern: after 3-4 days of fever a temporary improvement occurs, and then the fever intensifies again around the 5th-6th day. At that time a red macular exanthema (skin rash) can appear. After a few days the temperature returns to normal, though this may be followed by a period of difficult recovery lasting for weeks, characterised by fatigue, muscle pains and neuralgias. No specific treatment exists and the disease resolves spontaneously. However, the clinical course is often atypical, such as a febrile influenza-like syndrome.

Occasionally, haemorrhagic forms can occur: around the 3rd to 4th day the condition deteriorates rapidly, with occurrence of haemorrhages and abdominal pain. Life-threatening gastrointestinal bleeding can occur and/or a state of shock can arise. These complicated forms are extremely rare in tourists. Young children of the indigenous population in the Far East are especially affected by it. The incidence of these life-threatening forms has definitely increased in the last 20 years. It is assumed that after an earlier infection with one of the 4 serotypes there is an increased risk of complications upon subsequent infection by another, different serotype. For three months after an infection with one serotype, there is cross-protection against the other serotypes. After that (some authors estimate for a period of 5 years) there is some risk of the haemorrhagic form or shock. It is impossible to say how great this risk is for an individual traveller. In practice the risk remains very small in absolute terms.

There is no vaccine. Protective measures against mosquito bites form the cornerstone of prevention.

Protective measures against mosquito bites are especially important in the event of a local epidemic. The transmitting *Aedes* mosquito tends to bite in the morning (i.e. from 9 to 11 a.m.), and during the afternoon until just before sunset (i.e. from 13.00 to 17.00).