

# Dengue Fever

## What is dengue fever?

Dengue fever is a disease caused from being bitten by dengue-infected *Aedes* mosquitoes, which are present in many tropical countries.

Dengue fever emerged as a worldwide problem in the 1950s, and is becoming more and more widespread as each year passes. With nearly half of the world's population now living in areas at risk of infection, dengue virus is a leading cause of illness in the tropics and subtropics. Up to 400 million people are infected worldwide every year.

## How do you get dengue fever?

You catch dengue fever by being bitten by mosquitoes that live in many popular tourist destinations including Southeast Asia and the Pacific islands. You cannot catch dengue fever in New Zealand, and if you have returned to New Zealand with dengue fever, you cannot infect other household members.

## What are the symptoms of dengue fever?

Dengue fever usually begins with a sudden onset of a high fever and a severe headache. Those affected may also get a skin rash and muscle and joint pain. Nausea, vomiting, and loss of appetite are common. The illness usually lasts up to 10 days, but recovery may take some time, and people can feel tired and depressed for weeks.

## How is dengue fever diagnosed?

Dengue fever is diagnosed by a combination of typical symptoms, and blood tests to check for the body's response to infection.

## How is dengue fever treated?

There is no specific treatment for dengue fever, but it is important to take paracetamol rather than aspirin for the fever, headache and muscle pains, as aspirin can increase the risk of bleeding. People with dengue fever should also rest and drink plenty of fluids. Those who become more unwell will need hospital treatment with fluids into their veins and close monitoring, to make sure they don't start to bleed or lose too much fluid from their bloodstream.

## How can dengue fever be prevented?

Effective vaccines to protect against dengue fever are currently not available, and there are no drugs you can take to prevent it (like you can with malaria). The best way to protect against it is to avoid mosquito bites by doing the following:

- Wear clothing that covers the arms and legs
- Wear hats and shoes (rather than sandals)
- Apply insect repellent to skin. The most effective repellents are those containing DEET (diethyl toluamide) – at a concentration of between 30 to 50%
- Apply permethrin insecticide to clothes
- Use mosquito nets impregnated with permethrin
- Use electric insect-repellent devices, or mosquito coils
- When possible, stay in accommodation that has screens on doors and windows, or is air-conditioned

These mosquitoes bite in the early morning and at dusk as well as night time, so you will need to be vigilant at those times.

### Can dengue fever be fatal?

There is a severe form of dengue fever - known as dengue haemorrhagic fever - which can cause bleeding and collapse, and can be fatal. This is more common in people who get dengue fever more than once. Dengue haemorrhagic fever is fatal in about five percent of cases, mostly among children and young adults. This risk is important for Pacific peoples who may make a number of visits back to their home country over the years, and so risk repeat infections.

### What does the public health service do?

Auckland Regional Public Health Service (ARPHS) receives notification of all cases of dengue fever in the Auckland region, and is responsible for investigating the country of origin of infection, and giving health advice to prevent a further infection. ARPHS also works to make sure exotic mosquitoes do not become established in Auckland.

**For further information contact the Auckland Regional Public Health Service on 09 623 4600**

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