

Auckland Regional Public Health Service

Rātonga Hauora ā Iwi o Tamaki Makaurau



Working with the people of Auckland, Counties Manukau and Waitemata

Communicable disease fact sheet – Dengue Fever

What is Dengue Fever?

Dengue fever is a disease caused by the dengue virus, of which there are four types.

Dengue fever is getting more and more common. Between 1997 and 2006, an average of 16 cases was notified in the Auckland region each year. In 2007, this leapt to 93 cases in the year. We are likely to have a similar number again this year. Most of these were Pacific people visiting friends and family in the Pacific. In 2007 there was an outbreak in the Cook Islands. In 2008, there have been outbreaks in Tonga, Samoa and Fiji. Dengue fever is likely to be an ongoing problem in the Pacific.

How do you get dengue fever?

Dengue fever is spread by the bite of dengue-infected *Aedes* mosquitoes, which bite during the daytime, mostly at dawn and dusk. These mosquitoes are present in the Pacific Islands and many other tropical countries, but do not survive in New Zealand, so you cannot catch Dengue fever in New Zealand. You CAN catch dengue fever in the Pacific Islands.

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?

There is no vaccine to protect against dengue fever, and no drugs you can take to prevent it (like you can with malaria). However, there are things you can do to protect yourself:

- 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 – 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

Can dengue fever kill?

There is a severe form of dengue fever - known as dengue haemorrhagic fever - which can cause bleeding and collapse, and can kill. 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.