

Dengue Fact Sheet

Page last updated: 6 July 2016

What is Dengue?

Dengue is a viral disease transmitted by some types of mosquitoes. It is widespread across Asia, the Pacific, Central and Southern America and Africa where these mosquitoes exist. Dengue outbreaks occur each year in north Queensland following cases imported from overseas. Dengue does not spread from person to person and is transmitted through the bite of an infected mosquito.

There are four types of dengue viruses known to cause disease in humans- dengue 1, 2, 3 and 4. A person infected with one type of dengue will only become immune to that type. They will not be immune to other types of dengue, and could be at higher risk of severe disease if they contract another type.

What are the symptoms?

Dengue causes illness that can range from a mild fever to a severe, even fatal condition. Some people, particularly young children, may have no symptoms; however most adults and older children get sick. The disease lasts about a week.

Typical symptoms include:

- sudden onset of fever
- intense headache (especially behind the eyes)
- muscle and joint pain (ankles, knees and elbows)
- loss of appetite, vomiting, diarrhoea, abdominal pain, a metallic taste in the mouth
- flushed skin on face and neck, fine red skin rash as fever subsides
- rash on arms and legs, severe itching, peeling of skin and hair loss
- minor bleeding (nose or gums) and heavy menstrual periods
- extreme fatigue

A small proportion of cases can progress to severe dengue (sometimes called dengue haemorrhagic fever and dengue shock syndrome), which can occur in both adults and children. A rapid deterioration can occur 2-5 days after onset of fever. The complications of severe dengue can lead to collapse and sometimes death.

Anyone showing symptoms of dengue should see a doctor as soon as possible.

How is it spread?

Dengue virus is spread by the *Aedes aegypti* and *Aedes albopictus* species of mosquito. These are day-biting mosquitoes.

Mosquitoes become infected with dengue after biting sick humans who have dengue virus in their blood. Between 8 and 12 days later if an infected mosquito bites someone else it can pass on the dengue virus.

People become unwell between 3 and 14 days after being bitten by an infected mosquito.

Anyone travelling to countries with known dengue activity is at risk of being bitten by dengue infected mosquitoes. The only way to prevent dengue is to avoid being bitten by mosquitoes.

How is dengue prevented?

In Australia, there is currently no vaccine or preventative medicine for dengue. Avoiding mosquito bites is the best prevention.

Precautions against Dengue mosquitoes are necessary in the daytime as well as night time:

- Cover as much exposed skin as possible, including wearing light coloured long-sleeved shirts and long pants.
- Use insect repellents, applied according to the product label. The most effective mosquito repellents contain Diethyl Toluamide (DEET) or Picaridin.
- Repellents containing oil of lemon eucalyptus (OLE) (also known as Extract of Lemon Eucalyptus) or para menthane diol (PMD) also provide adequate protection.
- Note that insect repellents containing DEET or picaridin, are safe for pregnant and breastfeeding women and children older than 2 months when used according to the product label.
- If you use both sunscreen and insect repellent, apply the sunscreen first and then the repellent.
- Use insecticide-treated (such as permethrin) clothing and gear (such as boots, pants, socks, and tents).
- Stay and sleep in screened-in or air-conditioned rooms.
- Use bed nets if you cannot keep mosquitoes outside.

See a doctor as soon as possible if you feel unwell while you are away or when you return.

How is it diagnosed?

Dengue is diagnosed by blood tests that identify the virus or antibodies to the virus. Everyone who has symptoms and has travelled to an area with dengue should be tested.

How is it treated?

There is no specific treatment for dengue. Anyone with dengue symptoms should see a doctor as soon as possible. People with dengue should rest and drink plenty of fluids to avoid dehydration. Aspirin, ibuprofen and other anti-

inflammatory drugs should be avoided as they increase the chance of bleeding. People with severe dengue will need to be admitted to hospital.

Avoiding mosquito bites while sick helps to prevent spreading the disease to others.

Dengue in Australia

In most parts of Australia, there is no risk of dengue being spread by mosquitoes because most areas of Australia do not have the *Aedes aegypti* or *Aedes albopictus* mosquitoes that can carry dengue. *Aedes aegypti* is currently limited to parts of Northern, Central and Southwest Queensland. The *Aedes albopictus* mosquito only occurs in the Torres Strait Islands.

Outbreaks of dengue occur each year in North Queensland. There is also the risk of local spread in the other parts of Queensland where *Aedes aegypti* is present. Dengue fever outbreaks generally begin when someone is infected with dengue overseas and arrives with the virus in their blood. This is called an imported case. A local dengue mosquito bites this person, becomes infected with the virus, and then passes it on to other people by biting them.

Preventing the spread of dengue in Australia

There are a number of ways in which the spread of dengue is prevented or controlled in Australia.

Health authorities in Queensland have comprehensive dengue management plans to manage these cases and outbreaks. If dengue is diagnosed in a person who lives in or travels to the regions of Queensland that have mosquitoes that can spread the disease, health authorities respond rapidly to prevent local spread. They also respond rapidly to bring an outbreak under control if it has already started. The response includes advising people to protect themselves from mosquito bites until they recover, and may include mosquito control measures.

Restrictions on blood donation apply for travellers coming from areas overseas where dengue occurs, or from affected areas of Queensland during outbreaks.

Further Information

More information on dengue can be found on WHO's website [here](#).

Queensland Health in collaboration with local governments has developed the [Queensland Dengue Management Plan 2015-2020](#) to minimise and prevent dengue outbreaks.

Enquiries may be directed to:

[Australian Government Department of Health](#)

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