# Dengue fever



# Dengue fever is an infection caused by dengue viruses, of which there are four different serotypes known to infect humans.

Serotype refers to groups of microorganisms that are extremely closely related, but can be distinguished by having slightly different antigens (a foreign substance which causes the body to produce antibodies) or causing the body to produce slightly different antibodies.

Dengue fever occurs in tropical and subtropical areas of the world, including northern Australia.



Dengue infection is a notifiable condition<sup>1</sup>

# How dengue fever is spread

In Australia the dengue virus is transmitted by a bite from the *Aedes aegypti* mosquito. Only the female mosquito transmits the dengue virus. This mosquito is a daytime biter, both inside and outside homes, and is most active in the hours after sunrise and before sunset. Other species of mosquito can transmit the virus but are not presently established in Australia.

Aedes aegypti mosquitoes breed inside and outside the home in containers holding water and rarely fly more than 200 metres from the breeding site. They do not breed in creeks, swamps, pools or other bodies of water.

#### Signs and symptoms

The disease has a sudden onset and symptoms may include:

- > fever for 3 to 7 days
- > intense headache and pain behind the eyes
- > muscle and joint pain
- > loss of appetite
- > vomiting and diarrhoea
- > skin rash
- > bleeding, usually from the nose or gums.

Recovery is sometimes associated with prolonged fatigue and depression.

Repeated episodes of dengue fever may result in excessive bleeding and shock but, with appropriate treatment, are rarely fatal.

# Diagnosis

Diagnosis of dengue fever is made by assessment of the signs and symptoms when seeing your doctor, followed by a blood test.

#### Incubation period

(time between becoming infected and developing symptoms)

3 to 14 days, commonly 4 to 7 days.

### Infectious period

(time during which an infected person can infect others)

A mosquito becomes infected if it bites an infected person while the fever is present (an average period of about 3 to 5 days).

After biting an infected person it takes 8 to 12 days before the mosquito can infect other people.

The mosquito remains infectious for life.

Dengue fever is not directly spread from person-to-person.

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#### **Treatment**

There is no specific antiviral treatment available.

General recommendations include controlling fever and pain with paracetamol rather than aspirin (aspirin may promote bleeding), and increasing fluid intake. Aspirin should not be given to children under 12 years of age unless specifically recommended by a doctor.

#### Prevention

- > Exclusion from childcare, preschool, school or work is usually not necessary but people experiencing fever from dengue infection should not be in an environment where they may be bitten by mosquitoes. If this is not possible they should stay at home until they have no fever and are therefore no longer infectious (usually 3 to 5 days).
- > There is no vaccine to prevent human infection by this virus.
- > Personal protection and the environmental management of mosquitoes are important in preventing illness.
- > Prevent access of mosquitoes to an infected person with a fever.
- > Protect yourself from mosquito bites at all times in dengue areas.

#### **Useful links**

Fight the Bite website <u>www.sahealth.sa.gov.</u> au/fighthebite

> Avoiding mosquito bites

SA Health website <u>www.sahealth.sa.gov.au</u>

- > Barmah Forest virus infection
- > Chikungunya virus infection
- > Japanese encephalitis
- > Kunjin/West Nile virus infection
- > Malaria
- > Murray Valley encephalitis
- > Overseas travel
- > Ross River virus infection
- > Yellow fever
- > When you have a notifiable condition

1 In South Australia the law requires doctors and laboratories to report some infections or diseases to SA Health. These infections or diseases are commonly referred to as 'notifiable conditions'.

#### You've Got What? 5th Edition

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\*SA Health Safety and Quality Community Advisory Group







