

what is dengue?

Dengue fever is a viral infection transmitted by mosquitoes.

how do you catch dengue?

Dengue is transmitted by the bite of an infected *Aedes* mosquito, most commonly *Aedes Aegypti* (which have black and white stripes on their legs). It can't be spread directly from person-to-person. This mosquito bites mainly during the daytime, peaking at dusk and dawn. It is found in the urban area of the tropics, with a high incidence in Asia, South-East Asia, the Caribbean and Central South America.

Incubation period

3–14 days (usually 4–7 days) before symptoms become apparent.



symptoms and diagnosis

The main symptoms are: fever, intense headache, pain behind the eyes, body and joint aches and rash (usually 3–4 days after the fever starts). Vomiting may also occur. The fever usually settles after 2–7 days but there may be lingering fatigue and depression. It is important to watch for signs of bleeding such as: bleeding gums, bruising, upper abdominal pain and blood in motions.

Diagnosis is made via blood tests. These include a blood count and specific tests for the virus in the blood stream. The blood test may need to be repeated to recheck blood counts and because it may take days before antibodies appear in the blood. There are four different strains of dengue. Recovery will provide long term protection against the specific strain causing the infection. A subsequent dengue infection can be caused by another strain.

dengue haemorrhagic fever/dengue shock syndrome/fever/shock

This is a rare but serious complication where bleeding occurs and shock may develop. There is greater risk of these complications occurring when there has been a previous infection with a different strain of dengue.

prevention

There is currently no vaccine available for dengue. Prevention measures include:

- Creating barriers, such as clothing, that cover the skin, use of screens on doors and windows in the home and nets over cribs/beds
- Use of insect repellents – the most effective are those containing DEET (N,-diethyl-meta-toluamide). Other insect repellents such as Citronella may be effective but only provide a much shorter period of protection. Citronella is only effective for approximately 30 minutes if applied directly onto skin. Citronella is also incorporated into wrist and ankle bands which can last all day
- Mosquitoes are attracted to perfumes, cologne and dark clothing
- Utilising air-conditioning is a deterrent
- Reduce stagnant water in and around the home. Change vase water regularly, empty pot plant bases and check drains and gutters

how to use DEET

DEET is safe to use for children from 2 months of age, provided it is not stronger than 30% (see DEET fact sheet). 10% DEET will provide protection for two hours, 20% DEET will provide protection for approximately 4 hours. It is best with children to apply the lowest effective concentration for the amount of time spent outdoors.

General instructions for DEET use include:

- Apply DEET sparingly on exposed skin. Do not use under clothing
- Do not apply DEET to cuts wounds or irritated skin
- After returning indoors wash treated skin with soap and water
- Do not spray directly on your face. Spray on hands and then apply to face avoiding mouth & eyes
- When applying repellent on children, apply on your own hands and then rub it on your child. Do not apply to children's hands (as they put them in their mouth)
- Do not allow children to apply the insect repellent to themselves
- Keep out of reach of children
- Avoid spraying in enclosed areas and do not spray near food

dengue fever treatment

There is no specific treatment for dengue. Supportive care with fluids and frequent blood test monitoring reduces complications. In severe cases, blood transfusions may be required. Aspirin and NSAID's (e.g. Ibuprofen) should not be used as they can increase the risk of bleeding. Paracetamol may be used to treat and reduce fever. It is important to keep hydrated. For further information refer to <http://www.dengue.gov.sg>