

3. Bleeding Prevention & Control

- Rest in bed to reduce risk of falls and injuries
- Avoid intramuscular injections (i.e. injection of a substance directly into muscle)
- If you develop bleeding, bruises or swellings, please consult a doctor immediately.

Discharge from Clinic

Once you start recovering from dengue and your platelet count improves, your clinic appointments may be spaced out.

Before discharge from clinic, a full blood count test is repeated to confirm that your platelet count and other blood parameters are back to normal. These blood tests can also be done at the polyclinic or GP clinic.

Can I Be Infected Again?

Yes, there are 4 known serotypes of dengue. Infection with one serotype will provide protection against only that particular serotype.

Future infection by other serotypes is possible, and the second infection may cause more severe disease.

Can I Spread Dengue to Others?

Dengue is **not** transmitted directly from one person to another.

Dengue is transmitted by infected mosquito bites. Persons in the same area may come

down with dengue if bitten by an infected mosquito. Download the myENV app or visit www.nea.gov.sg to get regular alerts on dengue clusters, and areas with high *Aedes aegypti* mosquito population.

Prevention of Dengue

1. **Get rid of mosquito breeding habitats**
(Most effective prevention method)
 - *Aedes* mosquitoes prefer to breed in clean, stagnant water easily found in our homes. Items that collect or are used to store water (flower vase, buckets) must be covered or drained. Do the Mozzie Wipeout at least once a week! to prevent mosquito breeding.
2. **Reduce the risks of mosquito bites**
 - Use air conditioning or install mosquito screens on windows/doors
 - Spray insecticide in dark corners around the house
 - Apply mosquito repellents containing DEET (N,N-diethyl-m-toluamide), picaridin or IR3535 as the active ingredient. These are the most effective in repelling mosquitoes. These products are safe even for use by pregnant women and nursing mothers. Products with less than 10% DEET are safe for young children and infants from two months of age.
 - Wear long-sleeve tops and long pants
3. **Apply these precautions when travelling to other tropical destinations.**

DENGUE FEVER

WHAT YOU NEED TO KNOW (OUTPATIENT ADVISORY)



National Centre for
Infectious Diseases



About Dengue

Dengue fever is a disease caused by the dengue virus which is transmitted to humans by infected *Aedes* mosquitoes. There are 4 dengue virus serotypes (i.e. groups of the same species) - DEN-1, DEN-2, DEN-3 and DEN-4.

The fever in dengue usually lasts between 2 to 7 days. Most people recover from dengue infection without requiring hospital admission.

Dengue Symptoms

- Fever
- Headache with pain behind the eyes
- Muscle and joint aches
- Rash
- Mild bleeding tendency – from nose, gums or other parts of the body, or heavy menses
- Easy bruising from minor knocks and bumps
- Nausea and vomiting

People who are older may have fever alone, and on average have fewer typical symptoms. It is thus important to have heightened awareness of risk of dengue at home or in the neighbourhood.

Risks from Dengue

The risk of death from dengue is very low, about 1 in 500, to 1 in 1000.

However, dengue can cause low blood pressure, and in rare cases may progress to severe dengue (i.e. dengue haemorrhagic fever or dengue shock syndrome).

Symptoms of serious complications may include:

- Major bleeding
- Low blood pressure or shock due to bleeding or leaking blood vessels
- Inflammation of the liver
- Inflammation of other organs e.g. heart or brain (rare)

People at risk of complications in dengue fever include people who are older, as well as people with chronic medical conditions such as hypertension, heart disease and kidney disease.

Warning Signs of Dengue

If you develop any of these warning symptoms or signs, please inform your doctors

IMMEDIATELY:

- Severe abdominal pain
- Persistent vomiting
- Vomiting blood
- Black and tarry stools
- Bleeding from nose or gums
- Drowsiness or irritability
- Pale, cold, or clammy (i.e. sweaty) skin
- Difficulty breathing

Treatment of Dengue

There are no antibiotics or anti-viral medications to treat dengue fever. Treatment includes rest and follow-up with a doctor to monitor your condition.

The main components to managing dengue fever are:

1. Fluid & Electrolyte Replacement

- Drink plenty of fluids (water, isotonic drinks, fruit juices and soups) to maintain hydration
- Ensure good volume of urine passed each day (approximately 1 to 2 litres per day) as a guide to adequate hydration

2. Symptom Relief & Fever Control

- Tepid sponging to relieve fever
- Painkillers (e.g. appropriately-dosed paracetamol) to relieve pain and control fever
- Medications may also be prescribed for nausea, vomiting and itch. Rash will usually resolve over 2 to 3 weeks
- Avoid aspirin and other anti-inflammatory drugs such as Brufen® (ibuprofen), Voltaren® (diclofenac), Synflex® (naproxen) or Ponstan® (mefenamic acid) as they may cause gastric ulcers and subsequent bleeding, and worsen platelet function
- If in doubt, please consult your doctor