



Dengue Fever FAQs



Dengue fever has arrived in Hong Kong. We need to protect ourselves.

Locally acquired cases of Dengue (Den-gee) have been reported each year in Hong Kong since 2018. The Hong Kong Centre for Health Protection has reported the first locally acquired case in a Yeun Long man who became ill on 03 April 2020.

Dengue appears every year in Hong Kong, but usually there are only a few cases, and,

until 2018, the majority of patients acquired the disease elsewhere in Asia and then had confirmation of Dengue on return to Hong Kong.

It seems likely that Dengue is becoming endemic in Hong Kong.

What is Dengue Fever?

Dengue is a viral illness, which makes patients feel terrible: they have high fevers and may also have muscle and bone pain; headaches; pain behind their eyes; joint pain; nausea; vomiting; bleeding from the gums, or nosebleeds, or bruising; and a characteristic rash.

Severe Dengue is known as 'Dengue Haemorrhagic Fever'.

There are four types of dengue virus.

Where is Dengue found?

It is endemic in over 100 countries in tropical areas, including Southern China; South-East Asia, the Philippines, Indonesia, the Indian sub-continent; Africa; South and Central America, the Caribbean.

According to the United States Centres for Disease Control:

"The four dengue viruses originated in monkeys and independently jumped to humans in Africa or Southeast Asia between 100 and 800 years ago. Dengue remained a relatively minor, geographically restricted disease until the middle of the 20th century. The disruption of the second world war – in particular, the coincidental transport of Aedes mosquitoes around the world in cargo – are thought to have played a crucial role in the

dissemination of the viruses. Dengue Haemorrhagic Fever was first documented only in the 1950s during epidemics in the Philippines and Thailand.”

How is it diagnosed?

By history, the clinical picture and blood tests.

How is it treated?

There is no specific treatment – there is no drug that kills the dengue virus – so treatment is “supportive” - controlling temperature, giving intravenous fluids to prevent dehydration and giving painkillers all help.

How serious is it?

Most patients recover, but there is a small fatality rate, so the disease is taken very seriously by the Department of Health in Hong Kong. The majority of patients are hospitalised for supportive treatment.

How is Dengue transmitted?

In Hong Kong, dengue virus is transmitted by the bite of the female mosquito *Aedes albopictus* (Ay-ee-dees Al-boh-pick-tus), a species of mosquito indigenous to Hong Kong.

Aedes albopictus is a small dark mosquito with white stripes on its legs.

The female lays her eggs in still water. The adult mosquitos usually stay within about 200m of their birthplace.

Aedes albopictus is a very aggressive daytime biter. Its peak feeding times are during the early morning and late afternoon. This mosquito has a rapid bite that allows it to escape most attempts by people to swat it.

The mosquito can transmit dengue from an infected person to others.

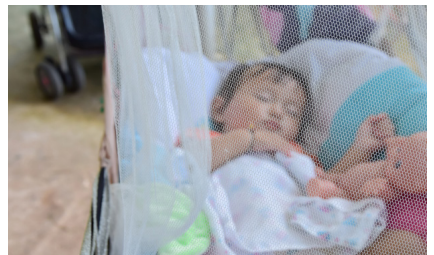
How can I avoid getting Dengue fever?

There are no pre-exposure preventative medicines.

Getting Dengue does not prevent future attacks, because there are four types of Dengue virus, and though one develops immunity to the virus one has been infected with, there is no cross-immunity to the other viruses.

The first attack of dengue is often quite mild, and further infections are usually worse.

There are various vaccines, but none is perfect. The World Health Organisation recommends vaccination only for people who have been



previously infected and who are visiting or living in high risk areas. There are currently no vaccines licensed in Hong Kong.

As individuals, we should avoid being bitten by mosquitoes.

How can I avoid mosquito bites?

Mosquito control measures are already being taken by the Hong Kong Government, the Department of Health is instituting the control measures and notifying medical personnel and the public on a day to day basis. The Department of Health has good control of the situation. However, the potential for further cases of dengue at this time is real.

Everyone needs to be aware of mosquito control measures, including cutting down on possible water breeding grounds; preventing mosquitoes from entering their homes; mosquito traps; and other means.

In some situations in Hong Kong mosquito nets may be appropriate.

Because the mosquitos don't travel far, taking care of your own area will make a big difference.

Mosquitos are attracted to dark clothing. Wear light-coloured clothing, covering ankles and arms.

Use insect repellents

DEET mosquito repellent is very effective and is recommended by the Centre for Health Protection.

DEET is generally safe, but some people get skin rashes from DEET, and there is a handful of reports of severe reactions, especially in children.

The Centre for Health Protection recommends using weaker solutions of 10% DEET for children, and adults should carefully apply the DEET to children.

For children visiting endemic areas, the Centre for Health Protection recommends 'normal strength' 30% DEET.

There are a number of less toxic repellents for children and babies, such as citronella (1) and tomato mosquito repellent spray, but these child-friendly repellents are not as effective as DEET.

Children should wear appropriate clothing.

Nets for babies' prams are available in baby shops.

Anecdotally, Vitamin B1 (thiamine) is believed to decrease mosquito bites, however, recent research suggests it is not effective (2) (3).



How can we help?

At Marina Medical, we provide blood testing for Dengue infection and advice on prevention and treatment. Talk to us if you are planning a trip to a dengue endemic area.

References

1. Kongkaew C, Sakunrag I, Chaiyakunapruk N, Tawatsin A. Effectiveness of citronella preparations in preventing mosquito bites: systematic review of controlled laboratory experimental studies. *Trop Med Int Health*. 2011;16(7):802-10.
2. Ives AR, Paskewitz SM, Inter L, S, Biology Interest G, Entomology C. Testing vitamin B as a home remedy against mosquitoes. *J Am Mosq Control Assoc*. 2005;21(2):213-7.
3. Croft AM. Malaria: prevention in travellers (non-drug interventions). *BMJ Clin Evid*. 2014;2014.

For enquiry or appointment, please visit
<http://www.marinamedical.hk/en/contactus/enquiry>