

Chikungunya Fever



Causative agent

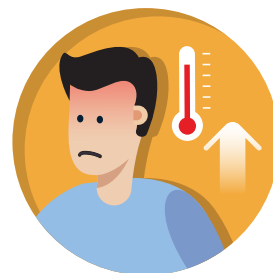
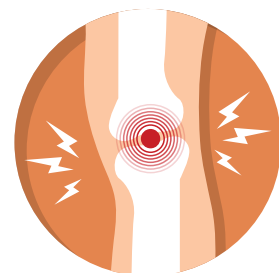
Chikungunya fever is a mosquito-borne viral disease caused by the chikungunya virus. The disease has been identified in over 110 countries in Africa, Asia, Europe, the Americas and islands in the Indian and Pacific Oceans.

Clinical features

The disease is characterised by fever and debilitating joint pain. The name “chikungunya” derives from a word in the Kimakonde language, meaning “to become contorted”, and describes the stooped appearance of patients suffering from joint pain. Other common signs and symptoms include muscle pain, headache, nausea, fatigue and rash. Symptoms are generally self-limiting and last for a few days, while in some cases joint pain may persist for several months, or even years.

Severe symptoms and deaths from chikungunya are rare and usually related to other coexisting health problems. Most patients recover fully. Occasionally, chikungunya virus can cause severe complications of the eye, heart and nerves. Newborns, people of older age or patients with underlying medical conditions are at higher risk for more severe disease.

Available evidence suggests that people who have been infected once are likely to be immune from future infections.



Mode of transmission

Chikungunya fever is most commonly transmitted to humans through the bites of infective female *Aedes* mosquitoes. When a patient suffering from chikungunya fever is bitten by a vector mosquito, the mosquito may be infected and it may spread the disease by biting other people.

In Hong Kong, the vector *Aedes aegypti* is not found, but *Aedes albopictus*, which can also spread the disease, is a mosquito commonly found in the locality. These mosquitoes can be found biting throughout daylight hours and there may be peaks of activity in the early morning and late afternoon.

Chikungunya virus can also be rarely transmitted from mother to newborn around the time of birth.

Incubation period

The incubation period ranges from 2 to 12 days, commonly 3 to 8 days.



Management

There is no specific antiviral drug treatment for chikungunya fever. Treatment is directed primarily at relieving the symptoms, including using anti-pyretics, analgesics and replacement of fluids.

Prevention

At present, there is no locally registered chikungunya fever vaccine available in Hong Kong. The best preventive measure is to avoid mosquito bites and prevent mosquito proliferation.

Prevention of mosquito bites

1. Wear loose, light-coloured, long-sleeved tops and trousers.
2. Use DEET-containing insect repellent on exposed parts of the body and clothing.
 - Pregnant women and children of 6 months or older can use DEET-containing insect repellent. In general, use DEET of up to 30% for pregnant women and up to 10% for children
3. Take additional preventive measures when engaging in outdoor activities:
 - Avoid using fragrant cosmetics or skin care products
 - Re-apply insect repellent according to instructions
 - If both insect repellent and sunscreen are used, apply insect repellent after sunscreen



Prevention of mosquito proliferation

1. Prevent accumulation of stagnant water
 - Change the water in vases once a week
 - Avoid using saucers underneath flower pots
 - Cover water containers tightly
 - Ensure air-conditioner drip trays are free of stagnant water
 - Put all used cans and bottles into covered dustbins
2. Control vectors and reservoir of the diseases
 - Store food and dispose of garbage properly

For more information about control and prevention of mosquito breeding, please visit the website of the Food and Environmental Hygiene Department (FEHD) at https://www.fehd.gov.hk/english/pestcontrol/handbook_prev_mos_breeding.html

Advice for travellers

1. Take preventive measures to avoid mosquito bites. For children who travel to countries or areas where mosquito-borne diseases are endemic or epidemic and where exposure is likely, children aged 2 months or above can use DEET-containing insect repellents with a concentration of DEET up to 30%. For details about the use of insect repellents and the key points to be observed, please refer to 'Tips for using insect repellents' (<https://www.chp.gov.hk/en/features/38927.html>).
2. If going to affected areas or countries, arrange medical consultation at least 6 weeks before the trip, have extra preventive measures to avoid mosquito bites.
3. If travelling in endemic rural areas, carry a portable bed net and apply permethrin (an insecticide) on it. Permethrin should NOT be applied to the skin. Seek medical attention promptly if feeling unwell.
4. Scientific studies have shown that infected persons can transmit the virus to mosquitoes through mosquito bites even if they remain asymptomatic or before their onset of symptoms, leading to further spread of the disease. Hence, travellers who return from affected areas should apply insect repellent for at least 12 days after arrival to prevent mosquito bites. If feeling unwell e.g. having a fever, the person should seek medical advice promptly, and provide travel details to the doctor.



Centre for Health Protection Website www.chp.gov.hk

Health Education Infoline of the Department of Health

2833 0111