



FAQs

Frequently Asked Questions on Chikungunya Fever

Prevent Control



**World Health
Organization**

Regional Office for South-East Asia

Vector-borne diseases

Chikungunya • Dengue • Japanese encephalitis • Kala-azar • Lymphatic filariasis • Malaria • Schistosomiasis

Frequently Asked Questions on Chikungunya Fever

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FAQs

Q 1: What is chikungunya fever?

Chikungunya fever is caused by a virus transmitted through the bite of an infected *Aedes* mosquito. The disease shares some clinical signs with dengue, and can be misdiagnosed in areas where dengue is common. The name "chikungunya" comes from a word in an African dialect, meaning "that which bends up" or is contorted – as many sufferers appear stooped and bent due to joint pain.

As it usually co-occurs with dengue fever, chikungunya is often misdiagnosed. Hence the numbers of actual cases of chikungunya fever are likely to be much higher than reported. The socioeconomic burden of this disease is often underestimated. Since the disease is very rarely fatal, it is often low in priority.

Q 2: Where does it occur?

Chikungunya occurs in tropical countries, and has been reported from Africa, South Asia and South-East Asia. The first case was reported from United Republic of Tanzania in 1952.

India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand have experienced chikungunya disease outbreaks in the last few decades.

Q 3: What are the symptoms of chikungunya?

The symptoms of chikungunya include a sudden onset of fever, severe headache, chills, nausea, vomiting, fatigue, muscle pain, joint swelling and joint pain.

The disease is characterized by severe – sometimes persistent – joint pains. The areas around the joints become swollen and painful to touch. This

acute phase is severe and incapacitating, and lasts 3–10 days. A patient is unable to move or walk at this time.

Skin rashes occur in 40–50% of patients, usually appearing between 2 and 5 days after the onset of fever. Unlike the small, dot-like rash seen in dengue fever, the chikungunya rash is big and flat (a maculopapular rash).

The recovery or convalescent phase can last from weeks to months with accompanying joint pain and rheumatism. In some cases it can last for years.

Q 4: How can you tell the difference between chikungunya and dengue?

Despite many similarities with dengue fever, there are some features that help in differentiating between these two diseases. Making this distinction is important – as dengue fever has the potential for worse outcomes, including death.

In chikungunya, the fever duration is shorter, there is more frequent maculopapular rash, severe joint/bone pain is frequent and lasts over a month but shock and haemorrhage are rare.

Dengue, on the other hand, has a longer duration of fever, infrequent maculopapular rash and a shorter duration of joint pain. Dengue fever can develop into dengue haemorrhagic fever, with bleeding from the nose, gums or skin, and/or gastrointestinal bleeding). In rare cases, dengue patients can develop dengue shock.

Health officials should consider testing for chikungunya if there is a cluster of patients with fever and severe joint pain.

Q 5: Are there any laboratory tests that can confirm chikungunya fever?

Yes, there are laboratory tests that can confirm this infection. However, most of the methods require significant infrastructure and technical expertise and so may not be widely available.

Three main types of laboratory tests are used for diagnosing chikungunya.

- Virus isolation – within the first 3 days of illness.
- A type of test based on the genetic material, known as reverse transcriptase-polymerase chain reaction (RT-PCR) – the test can be done from days 1–8, after onset of illness.
- Tests based on antibodies, called serological assays for immunoglobulin M (IgM) or immunoglobulin G (IgG) – tests can be done 4 days after onset of illness, and beyond.

The virus can only be detected in the blood in the initial days after infection, but may not be detected later. Therefore, results from virus isolation and RT-PCR testing could show false negative, and should not be used to exclude the diagnosis.

Q 6: How long does it take for the disease to develop?

The time from the infected bite to the onset of illness can range from 2 to 12 days, but is usually between 3 and 7 days. However, “silent” infections or infections without symptoms do occur, although their prevalence is unknown.

Q 7: Is there any seasonal pattern for chikungunya fever?

Chikungunya can spread all year round. Warm humid weather and stagnant water breeds the mosquitoes that carry the virus, which is why an epidemic is most likely to occur during post-monsoon periods.

Q 8: What is the treatment for chikungunya fever?

If you suspect you have symptoms of chikungunya fever, you must report this to your doctor or to the nearest health centre. Currently there is no specific drug against chikungunya fever. Proper and early treatment with bed rest and sufficient intake of fluids is recommended.

Paracetamol is commonly used to relieve symptoms of fever and joint pains.

There is no vaccine for chikungunya fever yet.

Q 9: How does the disease spread?

Aedes mosquitoes, which breed in rural, urban and semi-urban areas, are vectors of this disease. They bite mostly during the day and are easily recognized by the black and white stripes/spot markings on their bodies and legs.

They breed in anything which can hold clean water including tyres, coconut shells, flower pots, storage jars and cooling systems. The eggs become adults within a span of 7–10 days. The mosquito can rest in and around houses, schools and other areas where it is dark, cool and shaded.

Q 10: How can we prevent chikungunya?

Since specific drug treatment and vaccines are not available, concerted efforts should be directed against the vector mosquitoes. It is important to eliminate

their breeding grounds in order to control the disease. Efforts should be intensified before the expected transmission season, particularly during and after the rainy season, and at the time of an epidemic.

Q 11: How does one avoid mosquito bites?

In order to avoid mosquito bites:

- Wear full-sleeve clothes and long dresses to cover the limbs.
- Use repellents – care should be taken in using repellents on small children and the elderly.
- Use mosquito coils, repellents and electric vapour mats during the daytime.
- Use mosquito nets to protect babies, old people and others who may rest during the day. The effectiveness of such nets can be improved by treating them with insecticides. Curtains (cloth or bamboo) can also be treated with insecticides and hung at windows or doorways, to repel or kill mosquitoes.

It is also important to protect people diagnosed with chikungunya fever since mosquitoes become infected when they bite such people. Mosquito nets and coils can prevent mosquitoes from biting sick people and help to stop the spread of the disease.

Q 12: What should be done to prevent mosquitoes from breeding?

To prevent mosquitoes from breeding, follow these simple steps.

Every week:

- Inspect and clean the interior and exterior of the home and its surrounding areas.

- Drain tanks, barrels, drums and buckets, animal water troughs, water storage vessels, plastic food containers, used coconut shells and air coolers, etc. before refilling.
- Empty air coolers when not in use.
- Change water in flower vases.
- Scrub the insides of vases to remove mosquito eggs.
- Remove water in plant pot plates. Scrub the plate thoroughly to remove mosquito eggs.
- Clear fallen leaves and stagnant water in drains and gardens. Some leaves can collect water.

Then, every month:

- Clear leaves in roof gutters and apron drains where feasible.
- Insecticide spraying can also be carried out by a trained professional.

And, at all times:

- Turn pails and watering cans over and store them under shelter.
- Place/store all articles that can collect rainwater, such as used tyres, under shelter.
- Cover rarely used gully traps. If possible, replace gully trap covers with non-perforated ones and install anti-mosquito valves.
- Do not litter. Paper cups and water bottles thrown into drains, grass verges, sides of roads, vacant lands and other public places can collect rainwater and help mosquitoes breed.

Q 13: What role can the community play in preventing chikungunya?

As in the prevention and control of dengue, community participation is a key factor in successfully preventing and controlling chikungunya.

- Resident welfare associations and village chiefs should reinforce anti-mosquito breeding campaigns, especially before the transmission period.
- Schools and religious groups should be used to convey simple messages to the community on ways to prevent the illness.

Chikungunya is a re-emerging disease in the WHO South-East Asia Region. It is a viral illness spread by the bite of infected mosquitoes and clinically resembles dengue fever. Though rarely life threatening, it can cause long-term pain. This booklet answers common questions, and is designed for the general public as well as health providers.

More information on chikungunya and other vector-borne disease is available from the Communicable Diseases Department web site:

http://www.searo.who.int/entity/world_health_day_2014



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