

Urban CHIKV Transmission Cycle







Humans, other vertebrates

Aedes aegypti Aedes albopictus















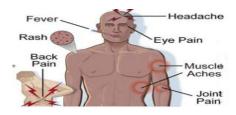
CHIKUNGUNYA

WHAT IS CHIKUNGUNYA?

Chikungunya is a mosquito-borne viral disease, caused by the Chikungunya virus (family: Togaviridae, genus: *Alphavirus*). It is transmitted to humans by virus-carrying *Aedes* mosquitoes.

SIGNS AND SYMPTOMS

Fever, joint pain & swelling and muscle pain, headache, nausea, fatigue and rashes.



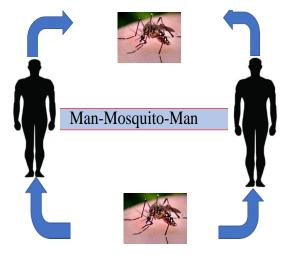
VECTORS

Most commonly, the mosquito species involved are *Aedes aegypti* and *Aedes albopictus* (often called the tiger mosquito). These species can transmit other viral pathogens (e.g. dengue, yellow fever, and West Nile viruses). *Aedes* mosquitoes can be found biting throughout daylight hours, though there may be peaks of activity at dawn and dusk. Both species are found biting outdoors, but *Ae. aegypti* will also readily feed indoors.

CHIKUNGUNYA VIRUS TRANSMISSION

CHKV is transmitted from human to human by the bites of infected *Aedes* mosquito, primarily *Aedes aegypti*.

Humans are thought to be the major source, or reservoir, of CHKV for mosquitoes. Therefore, the mosquito usually transmits the disease by biting an infected person and then biting uninfected person. An infected person cannot spread the infection directly to other persons (*i.e.*, it is not a contagious disease).



Aedes mosquito

TRANSMISSION CYCLE

HOW TO PREVENT Aedes MOSQUITOES

At present, stopping the invasion of *Aedes* vector mosquitoes is the only method to prevent or control the transmission of Chikungunya virus. Prevention and control relies heavily on reducing the number of natural and artificial water-filled container habitats that support breeding of the mosquitoes.

- By elimination of all potential vector breeding places near the domestic or peri-domestic areas.
- Not allowing the storage of water for more than a week. This could be achieved by emptying and drying the water containers once in a week.
- Straining of the stored water by using a clean cloth once a week to remove the mosquito larvae from the water and the water can be reused. The sieved cloth should be dried in the sun to kill immature stages of mosquitoes.









