

Chikungunya Fever Virus

General:

Chikungunya virus (CHIKV) is an insect-borne virus of the genus Alphavirus, which is transmitted to humans by virus-carrying Aedes mosquitoes. There have been recent outbreaks of CHIKV associated with severe morbidity. CHIKV causes symptoms similar to dengue fever. CHIKV manifests with a prolonged arthralgic disease that affects the joints of the extremities. The acute febrile phase lasts only two to five days. The pain associated with CHIKV infection of the joints persists for weeks or months.

Signs and symptoms: The incubation period of Chikungunya disease is from two to four days. Symptoms of the disease include fever up to 39°C, a petechial or maculopapular rash of the trunk and occasionally the limbs, and arthralgia or arthritis affecting multiple joints. Other nonspecific symptoms can include headache, conjunctival injection, and slight photophobia. Typically, the fever lasts for two days and then ends abruptly. However, other symptoms, namely joint pain, intense headache, insomnia and an extreme degree of prostration last for a variable period; usually for about 5 to 7 days. Patients have complained of joint pains for much longer time periods depending on their age.

Serology: IgM and IgG are detectable from the 2nd day of infection and reach a peak level on the 5th day. In case of a positive testing for IgG, IgM must be performed to confirm an acute infection. After a period of about 3 months the IgM titer will decrease under the detection limit.

The following tests are available:

- **Chikungunya IgM antibodies**

Indication: Suspicion of acute chikungunya infection, fever unknown origin with travelers after return from epidemic areas for chikungunya virus

Material: 1 ml serum

TAT: 7-10 days*

Method: IFT

Units: Titer

Ref.- range: <1:20

- **Chikungunya IgG antibodies**

Indication: Immune status on suspicion of earlier infection.

Material: 1 ml serum

TAT: 7-10 days*

Method: IFT

Units: Titer

Ref.- range: <1:20

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>