

# A common effort: Controlling the risk of Chikungunya

## Information to healthcare practitioners



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# What is Chikungunya?

- Chikungunya is a virus that is transmitted from human to human mainly by infected *Aedes albopictus* and *Aedes aegypti* mosquitoes (later referred to as **Aedes mosquitoes**) acting as the disease-carrying vector
- Chikungunya causes sudden onset of high fever, severe joint pain, muscle pain and headache
- As **no vaccine or medication** is currently available to prevent or cure the infection, control of Chikungunya involves vector control measures and encouraging people to avoid mosquito bites

# Symptoms

- Symptoms include:

- Sudden onset of high fever
- Headache
- Back pain
- Myalgia
- Arthralgia

- The symptoms will appear on average 4 to 7 days (but can range from 1 to 12 days) after being bitten by an infected *Aedes* mosquito

# Transmission

## The Vector

- Chikungunya virus is spread among humans mainly by the bites of infected *Aedes* mosquitoes acting as the disease-carrying vector
- These mosquito types are characterised by white stripes on their black bodies and legs
- The next slide shows a map of areas where mosquitoes infected with Chikungunya virus are present



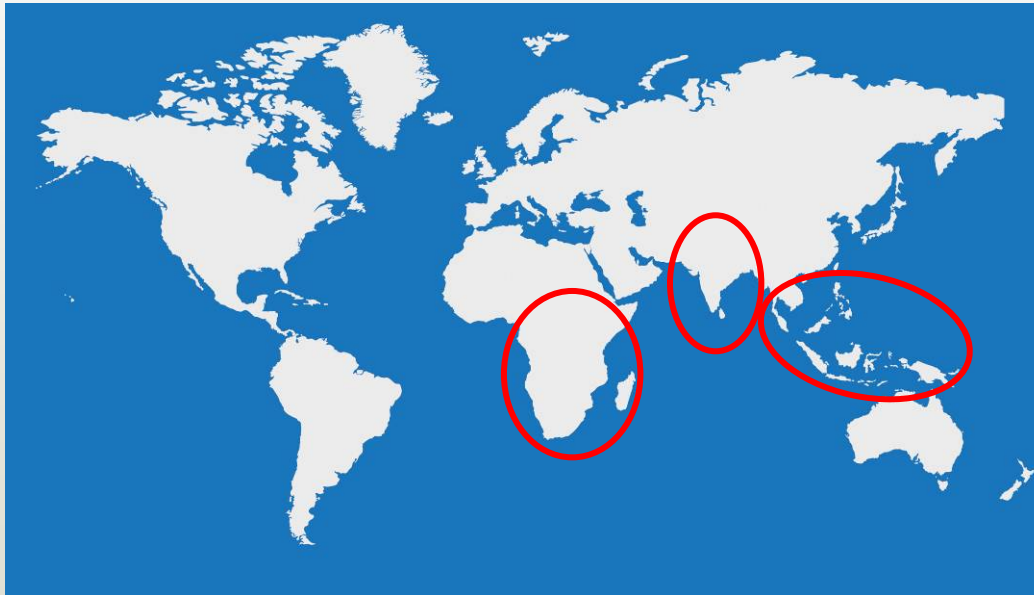
*Aedes albopictus*

# Epidemiology

## Chikungunya risk zones

Outbreaks of Chikungunya virus are usually found in:

- Africa
- Southeast Asia
- Indian subcontinent and islands in the Indian Ocean



# Epidemiology

## Presence of *Aedes* mosquitoes

The increasing presence of *Aedes* mosquitoes in Southern continental Europe has made outbreaks of Chikungunya a new health risk in these regions



It is therefore important to provide information on how to limit the risk of mosquito bites to people living in or visiting affected areas

# Preventive measures

## Seeking protection from Chikungunya

### When staying in affected areas:

- **Wear long-sleeved** shirts and long trousers
- **Use mosquito repellents, coils or other devices** that will help fend off mosquitoes
- If possible, sleep under **bed nets** pre-treated with insecticides
- If possible, set the **air-conditioning** to a low temperature at night – mosquitoes do not like cold temperatures
- Pregnant women, children under 12 years old, and people with immune disorders or severe chronic illnesses should be given personalised advice





# What should I do if I suspect my patient has Chikungunya?

## ECDC proposes the following case definitions for Chikungunya:

Clinical criteria: acute onset of fever ( $>38.5^{\circ}\text{C}$ ) and severe/incapacitating arthralgia not explained by other medical conditions

Epidemiological criteria: residing or having visited epidemic areas, having reported transmission within 15 days prior to the onset of symptoms

Laboratory criteria: at least one of the following tests in the acute phase:

- Virus isolation
- Presence of viral RNA by RT-PCR
- Presence of virus specific IgM/IgG antibodies in single serum sample collected
- Seroconversion to virus-specific antibodies in samples collected at least one to three weeks apart

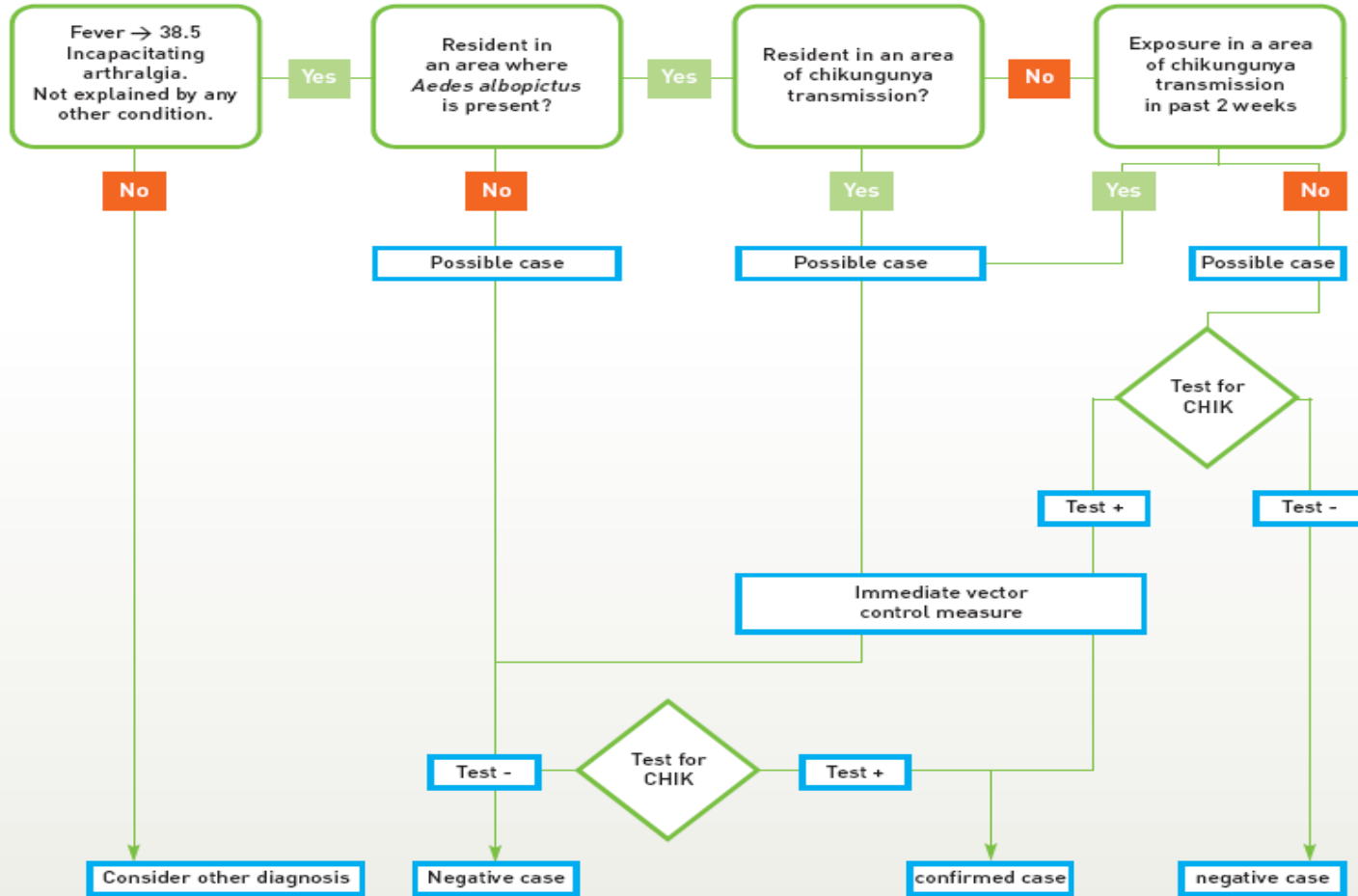
# What should I do if I suspect my patient has Chikungunya?

Chikungunya may be a reportable disease. ECDC proposes the following reporting levels:

## Case categories

- Possible case: a patient meeting clinical criteria
- Probable case: a patient meeting both the clinical and epidemiological criteria
- Confirmed case: a patient meeting the laboratory criteria, irrespective of the clinical presentation

# Algorithm for ascertainment of suspected Chikungunya case



Source: ECDC Mission Report: Chikungunya in Italy, Joint ECDC/WHO visit for a European risk assessment 17 – 21 September 2007

# What should I do if I suspect my patient has Chikungunya?

## Treatment

- In the absence of treatment for Chikungunya fever, focus is set on:
  - symptomatic treatment only (non-steroid anti-inflammatories, non-salicylic analgesics)
  - surveillance of the patient for complications
  - prevention of further transmission
- In order to prevent further transmission, infected persons should avoid further mosquito bites (e.g. use of repellents or sleeping under bed nets as much as possible)

## Complications

- Possible complications include gastro-intestinal complications, cardiovascular decompensation or meningo-encephalitis
- Fatalities have been reported mainly in aged patients or where the patient's immune system was weakened by underlying conditions

# Community measures

For healthcare practitioners in  
areas where the vector is present

## Vector control

It is important to provide information on how to reduce the spread of the vector to people living in affected areas



# Community measures

## Reducing the spread of the vector

- The vector lives in a number of different habitats
- The presence of water is of great importance for mosquitoes' breeding as their eggs require water in order to develop into adult mosquitoes



# Community measures

## Reducing the spread the vector

It is important that every citizen takes action to **avoid water gathering in containers** in the vicinity of their home





## Links/contacts

For more information on Chikungunya, please consult the ECDC website:

[http://ecdc.europa.eu/Health\\_topics/Chikungunya\\_Fever/Chikungunya\\_Fever.html](http://ecdc.europa.eu/Health_topics/Chikungunya_Fever/Chikungunya_Fever.html)