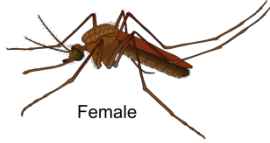
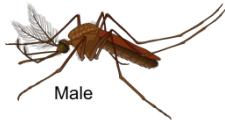


DENGUE, CHIKUNGUNYA AND ZIKA



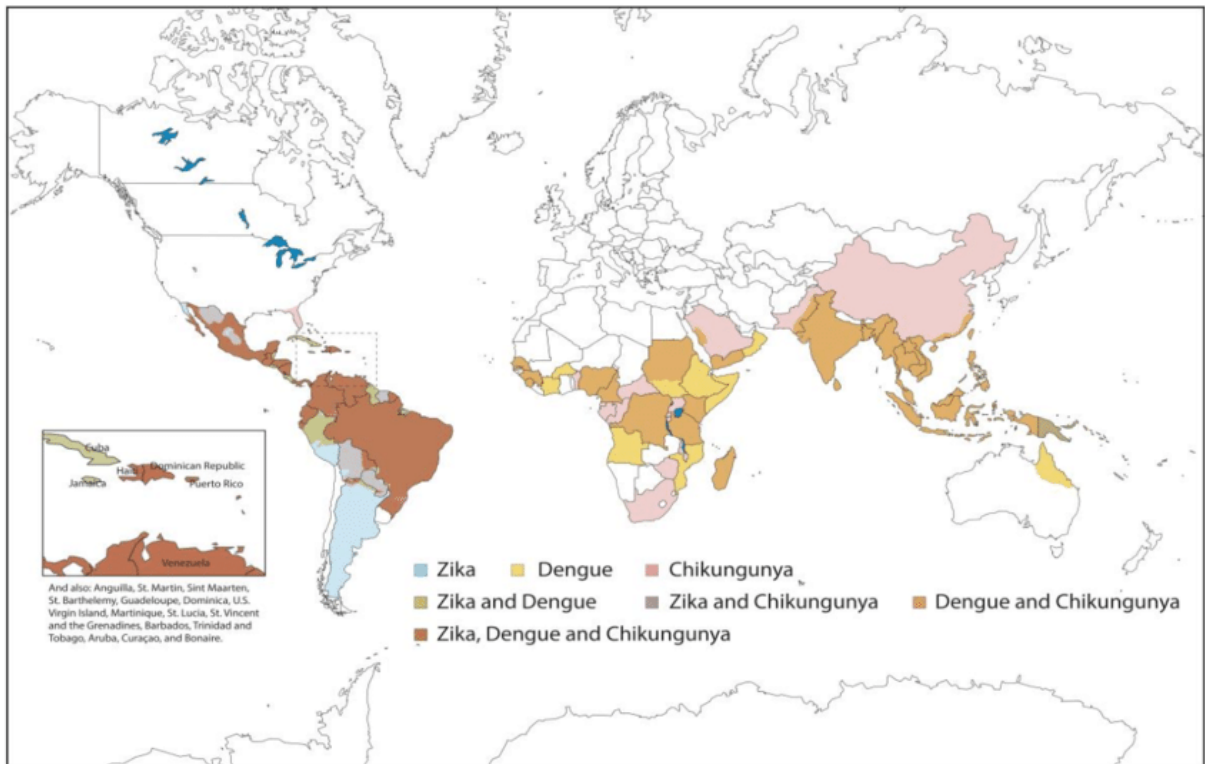
Aedes mosquito

Dengue fever, chikungunya and Zika are viral illnesses transmitted by the bite of an *Aedes* mosquito. These mosquitoes bite during daylight hours with a peak of activity just before daybreak, and then again for several hours before dark.

Aedes mosquitos are often present indoors and are common in areas of human habitation, including tropical urban and rural environments. Transmission of Zika can also occur through sex or from mother to child during pregnancy.

WHERE ARE THESE VIRUSES FOUND?

All three viruses are found in the tropics and subtropics – the areas highlighted in the map below.



SYMPTOMS

- > Relatively sudden onset of high fever
- > Severe frontal headache
- > Muscle and joint pain (another name for dengue is "*break-bone disease*" due to extreme bone and muscle pain)
- > Nausea and vomiting
- > Fatigue
- > Conjunctivitis (most likely with Zika)
- > Rash (typically with dengue 3-4 days after fever onset)

Seek immediate medical care if you suspect you have one of these infections. If untreated, they can cause Guillain-Barré (a disorder in which your immune system attacks your nerves), severe bleeding, microcephaly (small brain development in babies), coma and death.

Rash associated with Dengue

Common with dengue is a flat, red rash that appears 2-5 days after fever onset. The rash may be itchy. A second rash may appear later in the infection.



Initial dengue rash

TREATMENT

- There is no specific treatment for dengue fever, chikungunya or zika
- Most people recover quickly
- Get plenty of bed rest
- Drink lots of fluids
- Take acetaminophen (Tylenol®) to reduce fever
- Avoid aspirin or non-steroidal anti-inflammatory products, such as aspirin or ibuprofen, due to bleeding risk

PREVENTION

Since there are no vaccines to protect against dengue, chikungunya or zika, the best prevention is to avoid mosquito bites, following these tips:

- > Stay in screened or air-conditioned environments as much as possible
- > Use DEET-containing insect repellent on your skin. We recommend 30-40% DEET lotion for adults and 20% DEET lotion for children.
- > Use clothing that has been treated with permethrin for maximum protection from insect bites

ADDITIONAL RESOURCES FROM THE CDC

- > Travelers' Health - cdc.gov/travel
- > Dengue - cdc.gov/dengue
- > Chikungunya - cdc.gov/chikungunya
- > Zika - cdc.gov/zika