# Zika Virus Disease Information for Travelers

Zika virus infection (Zika Fever) is a mosquito-borne disease transmitted by *Aedes aegypti* and *Aedes albopictus.*The same mosquitoes can also transmit dengue and chicungunya fever.

Zika Fever was originally described in the 1940's with a few human cases being reported since then.

In May 2015 the Pan-American health Organization, reported the occurrence of cases in Brazil. Since then the virus has spread significantly affecting many South American and Caribbean countries in epidemic proportions (http://www.cdc.gov/zika/geo/index.html).

The clinical manifestations resemble a mild form of dengue fever and include fever, rash, joint pain and conjunctivitis. Symptoms are self-limited lasting from 2 to 7 days.

Besides the rapidly spreading epidemics, the problem with this outbreak is the identification of a strong association between Zika Fever and microcephaly and other congenital abnormalities when the infection affects pregnant women. This association was recently reported in Brazil but was also previously noted in the French Polynesia in 2014.

The lack of vaccines and population immunity along with the widespread presence of the mosquito vector compounds to make this a Public Health Emergency of International Concern, according to the World Health Organization (WHO).

A recent meeting by an Emergency Committee at WHO concluded that there is no justification for restrictions on travel or trade to prevent the spread of Zika Virus.

The recommendation by WHO at this time is to encourage countries to control mosquito populations and for travelers to prevent mosquito bites by following recommended practices, also embraced by the CDC:

- Cover as much exposes skin as possible (i.e. wearing long sleeves and long pants, especially during early morning and late afternoon when mosquitoes are more active);
- Use insect repellents (DEET 30-45%, picaridin IR3535, oil of lemon eucalyptus or para-menthanediol to exposed skin);
- Stay as much as possible indoors in air-conditioned environments;
- Apply permethrin (20% or greater) to clothing, bedding and mosquito netting;

- Help reduce mosquito population by emptying standing water from containers such as flowerpots or buckets.

The CDC additionally issued an interim set of recommendations for pregnant women considering travel to an area of Zika virus transmission:

- Consider postponing travel to ongoing Zika affected areas;
- If travelling is unavoidable, strictly follow measures to prevent mosquito bites. DEET, picaridin and IR3535 are safe for pregnant women;
- Health care providers attending pregnant women should ask about recent travel. Women who traveled to Zika Fever affected areas should be tested for Zika virus disease;
- Reverse transcription-polymerase chain reaction (RT-PCR) can be performed for symptomatic patients with onset of symptoms within the previous week. IgM and neutralizing antibody testing should be performed on specimens collected from 4 and more days after the beginning of symptoms.

Treatment is symptomatic with analgesics/antipyretics along with supportive measures such as rest and good hydration. Acetaminophen would be the drug of choice. Aspirin and NSAIDS are to be avoided because of the risk of misdiagnosing Zika for dengue fever with similar symptoms and the potential for bleeding complications.

Airlines in the US and around the world are announcing initiatives to waiver change fees for pregnant women booked to travel to Zika affected countries who wish to modify their travel schedule or itinerary.

As this is a volatile rapidly changing situation, readers are encouraged to visit other websites to keep current with the latest developments:

http://wwwnc.cdc.gov/travel/page/zika-information

http://www.who.int/mediacentre/factsheets/zika/en/

http://ecdc.europa.eu/en/healthtopics/zika_virus_infection/Pages/index.aspx