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UPDATES ON ZIKA VIRUS : WHAT TRAVELLERS NEED TO KNOW

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THE VIRUS

Zika virus is an emerging mosquito–borne virus that was first identified and named after the Zika Forest in Uganda in 1947. In 1952, the first human cases of Zika were detected and since then, outbreaks of Zika have been reported in tropical Africa, Southeast Asia, and the Pacific Islands. Zika virus disease is caused by a virus from the *Flavivirus* genus, *Flaviviridae* family, from the the Spondweni group. *Aedes* mosquitoes are considered as main vectors which usually bite during the morning and late afternoon/evening hours. Zika virus is transmitted to people through the bite of an infected mosquito from the *Aedes* genus, mainly *Aedes aegypti* in tropical regions. This is the same mosquito that transmits dengue, chikungunya and yellow fever.

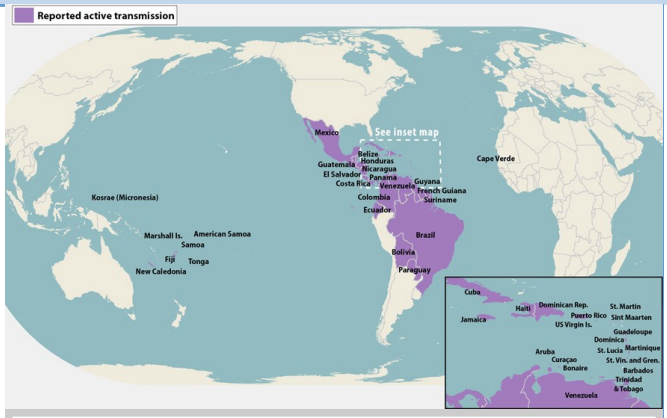
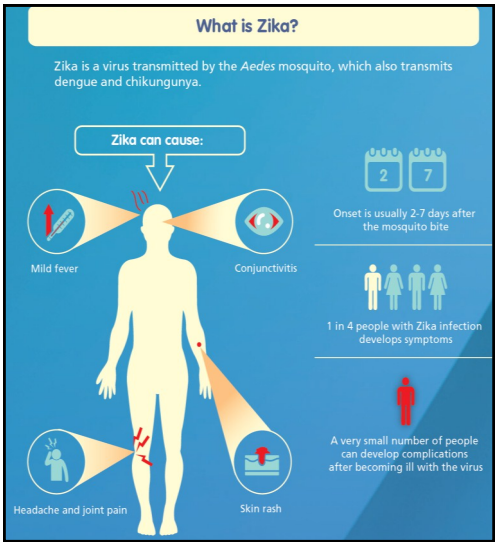


Fig 1: All Countries and Territories with Active Zika Virus Transmission



THE SYMPTOMS

The incubation period of Zika virus disease is unknown, but is likely to be a few days to a week. The symptoms are similar to other arbovirus infections such as dengue, and include fever, skin rashes, conjunctivitis, muscle/joint pain, malaise, and headache. These symptoms are usually mild and last for 2-7 days. During large outbreaks in French Polynesia and Brazil in 2013 and 2015 respectively, national health authorities reported potential neurological and auto-immune complications of Zika virus disease. Recently in Brazil, local health authorities have observed an increase in Guillain-Barré syndrome which coincided with Zika virus infections among the general public, as well as increase in babies born with microcephaly in northeast Brazil. Agencies investigating the Zika outbreaks found evidence and link between Zika virus and microcephaly as the virus can be spread from a pregnant woman to her foetus. However, an article by The New England Journal of Medicine showed otherwise and concluded that there is no absolute proof that Zika virus can cause microcephaly. Despite this discrepancies, Center of Disease Control (CDC) still recommends special precautions for pregnant women.

Infection with Zika virus may be suspected based on symptoms and recent history (e.g. residence or travel to an area where Zika virus is known to be present). The diagnosis can only be confirmed by laboratory testing for the presence of Zika virus RNA in the blood or other body fluids, such as urine or saliva. Zika virus is more frequently detected in saliva compared to blood.

THE VACCINE

There are no Zika vaccines in advanced development, although a number of existing flavivirus vaccine platforms could presumably be adapted, including flavivirus chimera or glycoprotein subunit technologies . Indian company Bharat Biotech is working on two Zika vaccines. One of them is classed as recombinant and the other is called as inactivated. Inovio Pharmaceuticals is working on a DNA-based vaccine for the Zika virus. The National Institute of Allergy and Infectious Diseases in the US is also working on a vaccine.

MALAYSIA'S STATUS

In Malaysia, 293 patients who were tested for dengue and Zika after showing symptoms of dengue, were declared clear of both diseases according to health officials. Malaysia's health ministry has issued guidelines on how to keep the Zika virus at bay, after World Health Organisation declared it an international public health emergency.

WHAT WE KNOW

- No vaccine exists to prevent Zika virus disease (Zika).
- Prevent Zika by avoiding mosquito bites (see below).
- Mosquitoes that spread Zika virus bite mostly during the daytime.
- Mosquitoes that spread Zika virus also spread dengue and chikungunya viruses.
- Zika virus can be spread by a man to his sex partners. Prevent sexual transmission of Zika by using condoms or abstinence.
- Pregnant women can be infected with Zika virus through the bite of an infected mosquito. The virus can be passed from a pregnant woman to her fetus during pregnancy or at delivery.

THE PREVENTIVE ACTION

Mosquitoes and their breeding sites pose a significant risk factor for Zika virus infection. Prevention and control relies on reducing mosquitoes through source reduction (removal and modification of breeding sites) and reducing contact between mosquitoes and people. Public are encourage to use insect repellent, wear preferably light-coloured clothes that cover as much of the body as possible, use physical barriers such as screens, closed doors and windows and sleeping under mosquito nets. It is also important to empty, clean or cover containers that can hold water such as buckets, flower pots or tyres. Special attention and help should be given to those who may not be able to protect themselves adequately, such as young children, the sick or elderly.

During outbreaks, health authorities may advise that spraying of insecticides be carried out. Insecticides recommended by the WHO Pesticide Evaluation Scheme may also be used as larvicides to treat relatively large water containers. Travellers should take the basic precautions described above to protect themselves from mosquito bites. The ministry of Health and CDC recommends that women who are pregnant or plan to become pregnant in the near term consider delaying travel to areas with Zika virus present. Since sexual transmission is possible, both men and women should strictly follow steps to prevent mosquito bites during the trip. It is especially important that pregnant women see a doctor if they develop a fever, rash, joint pain, or red eyes during their trip or within 2 weeks after traveling to a country where Zika has been reported.

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	20mg OD	With food, at approximately the same time	