



Zika Virus - Information and Rio 2016 preventative measures

History and transmission

The Zika virus was first identified in East Africa in the early 50's and until more recent times has not progressed beyond the continent. Zika virus disease outbreaks were reported in the Pacific region for the first time in 2007 and 2013 (Yap islands and French Polynesia, respectively), and from 2015 onwards in the Americas (Brazil and Colombia) and Africa (Cape Verde).

The Zika virus is transmitted 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 fevers. The *Aedes Aegypti* is a day-time biting mosquito that is prevalent in urban areas using standing water found in water containers, plant pots, disused tires etc. as ideal breeding grounds.

Historical data suggests that the prevalence of mosquitos in the dry and cooler winter season, in which the Games will take place, is reduced significantly due to the dry climate limiting the availability of breeding locations.

According to the United States Centre for disease control and prevention (CDC) only 1 in 5 people who contract the virus present any symptoms at all. Those that do contract the virus usually see symptoms similar to a mild form of Dengue virus such as fever, headache, joint pain and a rash. These symptoms usually last for between 2-7 days.

However, as the Zika virus does not have any form of immunisation or treatment at this time, and has been linked recently to other conditions such as Microcephaly, the most effective action against the virus is to target the proliferation of mosquitos carrying the virus and for individuals to take measures to protect themselves against being bitten by mosquitos.

Preventative measures

1. Nationwide awareness campaign

The Brazilian government is employing 220,000 personnel to conduct a nationwide campaign to raise awareness and educate the population about the Zika virus as well as to assist them with the identification and cleaning of areas of stagnant water in and around their homes where the mosquitos lay their eggs. This is currently seen as the most effective way of combatting the spread of the virus.



2. Preventative measures across all Olympic/Paralympic venues

The following actions will take place to reduce the presence of mosquitos and to reduce the possibility of individuals getting bitten

- Weekly inspection by municipal health authorities of all venues and surrounding areas for standing water collections with action being taken to resolve the cause of the water accumulation.
- Standing water collections tested for the presence of mosquito larvae. Should larvae be present, further targeted action will be taken. Collected larvae will undergo further tests for the presence of Zika, Dengue, etc.
- Targeted Misting / fumigation of the Village and all competition and training venues pre- Games and Games-time based on the findings of the inspections and tests. This will be repeated on the basis of need, assessed on the findings of the venue inspections.
- Regular collection of waste that can store water and assist in the proliferation of mosquitos.

3. Specific preventative measures in the Olympic/Paralympic Village

a) Residential apartments

- Air-conditioning in all bedrooms, limiting the need to maintain windows open.
- Mosquito screen to cover open windows in apartment service areas (where applicable).
- All Village residents to be provided with 1 x 165ml OFF! Mosquito repellent.



- Plug-in mosquito repellent provided in all bedrooms, the chemical that is used in the tablets is Es-bioallethrin.





b) Common areas

- Ongoing inspection and maintenance of swimming pools and fountains.
- Automated irrigation system to reduce the possibility of standing water.
- Cleaning of gutters and water ducts preventing water accumulation.
- Implementation of the Rentokil MIRA 360⁰ programme to reduce *Aedes Aegypti* populations in the Village by monitoring and testing to determine further action within the village, as and when necessary.

c) Surrounding areas

- Weekly monitoring of mosquito populations and testing for the presence of Zika/Dengue in the immediate vicinity of the Village and targeted fumigation based on the outcome of the monitoring/testing.
- Regular visits of health agents to local communities to identify areas of standing water collections and guidance to the community on measures to take to reduce the proliferation of mosquitos.

4. Fumigation

a) Olympic and Paralympic Village

The substance to be used in the fumigation process is known as *Cymerator* (Cypermethrin) and is identified by the World Health Organisation as a substance to be used in fumigation for the control of the *Aedes Aegypti* mosquito. This substance has been signed off by both Rio 2016 Health and Safety and Doping Control Services functional areas.

b) Rio 2016 competition and training venues and surrounding areas

The substance to be used by the municipal health authorities in the control of mosquito populations is called *Malathion*, an organophosphate. This substance is recommended by the Brazilian Health Ministry, the Pan American Health Organisation and the World Health Organisation. This substance has been signed off by both Rio 2016 Health and Safety and Doping Control Services functional areas.