
Zika virus

Summary

- Zika virus is a mosquito-borne virus. The virus is known to circulate in Africa, the Americas, Asia and the Pacific. There is no cure, specific treatment or vaccine for Zika virus.
 - Recently there has been spread of the virus to a number of countries not previously affected.
 - There is scientific consensus that Zika virus infection during pregnancy can cause certain birth defects.
 - The best defence against Zika virus is to avoid mosquito bites if you are travelling in a country with active Zika virus transmission.
 - As a precaution, pregnant women and women trying to get pregnant are advised to consider postponing travel to any area with active Zika virus transmission.
 - Men with Zika virus infection can transmit the virus to their sexual partners. Men with pregnant partners should use condoms for the duration of pregnancy or abstain from sex.
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The Zika virus (ZIKV) is a mosquito-borne disease, transmitted by bites from some species of *Aedes* mosquito, particularly *Aedes aegypti*. These mosquitoes bite in the day, particularly around dawn and dusk. In Australia, the species that can carry Zika virus are only found in parts of northern Queensland; however no cases of Zika virus infection acquired in Queensland have been identified.

There are usually no symptoms, but in around one fifth of cases the infection can cause an illness with fever, rash, conjunctivitis, severe headache and muscle pain. Illness from Zika is usually not severe and does not normally require hospitalisation.

Outbreaks of Zika virus have previously been reported in tropical Africa, Southeast Asia, and the Pacific Islands. All known cases of Zika virus in Australia have been in travellers returning from overseas.

There is no specific treatment or vaccine currently available. The best form of prevention is avoiding being bitten mosquitoes if you are in a country affected by Zika virus.

Recent outbreaks in Central and South America, particularly Brazil, have raised concerns that infection with Zika virus in pregnant women can result in certain birth defects, including a serious condition known as microcephaly. Extensive studies have now led to the scientific consensus that Zika virus infection during pregnancy can cause microcephaly in fetuses.

There is also scientific evidence supporting a causal link between Zika virus and **Guillain-Barre Syndrome**, which is a neurological complication.

History of Zika virus

Zika virus was first identified in Uganda in 1947 in rhesus monkeys. It was subsequently identified in humans in 1952 in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia and the Pacific.

The first documented outbreak of Zika virus in the South Pacific occurred on Yap Island in the Federated States of Micronesia in 2007. In October 2013, French Polynesia reported a large outbreak, which then spread to other Pacific Islands.

Symptoms of Zika virus

The symptoms of infection in a person are usually mild and can last for a few days and up to a week. Only around a fifth of people infected develop symptoms. When symptoms are present they can include:

- fever
 - skin rashes
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- conjunctivitis (eye infection)
- headache
- muscle and joint pain.

Zika virus complications

During large outbreaks in French Polynesia in 2013 and in Brazil in 2015, health authorities reported potential neurological and auto-immune complications of Zika virus disease.

In Brazil, local health authorities have observed an increase in Zika virus infections in the general public as well as an increase in babies born with microcephaly in northeast Brazil. There is now scientific consensus that Zika virus infection during pregnancy can cause microcephaly in babies. Furthermore, scientific evidence suggests a causal link between Zika virus infection and the neurological complication Guillain-Barre Syndrome.

Spread of infection

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 the viral infections dengue, chikungunya and yellow fever.

The time taken to develop symptoms after exposure is not known precisely, but is probably a few days to a week, and 14 days at most. This means it may take up to two weeks to become ill after a person has been exposed in a country with active Zika transmission.

Diagnosis of Zika virus

Zika virus infection is diagnosed through:

- medical history, including a travel history to look for any exposure in a country with active Zika transmission in the two weeks prior to illness
- physical examination, to look for evidence of the infection
- blood and other laboratory tests.

Treatment for Zika virus

Zika virus disease is usually relatively mild. Currently, there is no cure or specific treatment for Zika virus. Treatment aims to ease symptoms and reduce the risk of complications while the person recovers. If you have visited a country with active Zika virus transmission and have symptoms that could be caused by Zika infection, you should seek medical care and advice, especially as there could be other causes of your symptoms.

People diagnosed with Zika virus infection should:

- get plenty of rest
- drink enough fluids
- treat pain and fever with common medicines such as paracetamol.

Do not take aspirin or other non-steroidal anti-inflammatory drugs unless advised by your doctor, as these can be associated with a risk of bleeding if there is a dengue infection present.

If symptoms worsen, seek further medical care and advice.

Prevention of Zika virus

There is currently no vaccine available for Zika virus to protect against infection. All travellers to currently or potentially affected areas should take the following measures to prevent mosquito bites. These precautions are necessary in the daytime as well as night time:

- Wear long-sleeved shirts and long pants.
- Use insect repellents containing DEET or picaridin. Always use as directed. Insect repellents containing DEET and picaridin are safe for pregnant and breastfeeding women and children older than two months when used according to the product label.
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents).

- Use bed nets as necessary.
- Stay and sleep in screened-in or air-conditioned rooms.

The Australian Government's **Smartraveller website has important Zika virus-related travel advice for pregnant women**, women trying to get pregnant and other travellers.

In summary, as a precaution, pregnant women and women trying to get pregnant, as well as their partners, are advised to consider postponing travel to any area with active Zika virus transmission.

Which countries are affected?

Since 2015, Zika virus has spread rapidly to a number of countries, particularly in the Americas. People planning travel are advised to check whether the country they are planning to visit has active Zika virus transmission.

The most up to date information on countries experiencing active Zika virus transmission is available on the **Smartraveller** website.

Where to get help

- **Australian Government Department of Health – Zika virus**
- Your **GP (doctor)**
- Community health centre
- **Communicable Disease Prevention and Control Unit (Public Health Branch)**, Department of Health Victoria Tel. **1300 651 160**

This page has been produced in consultation with and approved by:

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