

View this article online at: patient.info/travel-and-vaccinations/zika-virus-leaflet

## **Zika virus**

Zika virus was a rare illness before 2015 when a sudden outbreak in Brazil became the subject of international headlines. However, it has been at a relatively low level since 2018. You can catch Zika virus if you are bitten by an affected mosquito. Zika virus is usually a very mild illness. However, it is possibly the cause of birth defects in babies born to mothers who have the infection in pregnancy. It may also cause other complications.

Concern about the possible link of these conditions with Zika virus led the World Health Organization (WHO) to declare it a public health emergency of international concern. Research on the prevention of Zika virus is ongoing.

#### What is Zika virus?

Zika virus is a type of germ. It is carried by a particular type of mosquito (Aedes aegypti). If you are bitten by this type of mosquito, you could become infected with Zika virus. For most people, this causes a very mild illness. You may not even be aware you have Zika virus.

The Aedes mosquito tends to bite during the daytime. This is different to the mosquitoes which transmit certain other infections such as malaria, which bite at night.

The Aedes mosquito can also carry other infections, such as chikungunya fever and dengue. These infections tend to occur in the same parts of the world, where this particular mosquito is mostly found.

Zika virus was first found in Africa in 1947. Until 2013 it was not at all common and not found in many countries. However, it started to spread across the world and in 2015 there was an outbreak in a number of places.

The main areas with Zika were South America (especially Brazil and Columbia), Central America, the Pacific region and many of the Caribbean islands. It is possible that the virus may change (adapt) in the future, so it could be carried by another type of mosquito found in North America.

## What are the symptoms of Zika virus?

In most people, Zika virus is very mild. In fact, most people have no symptoms at all and do not know they have had the virus. If symptoms do occur, they usually start 3-12 days after a bite from an infected mosquito. Symptoms may include (but do not always include):

- A high temperature (fever).
- Headache.
- Aches in muscles and joints.
- Painful eyes or red itchy eyes.
- An itchy rash.
- Feeling weak and tired.

Other less common symptoms have also been reported, such as swelling in the legs and having tummy upsets. Symptoms normally last just a few days.

#### How common is Zika virus?

It is not known how many people have been affected by Zika virus since the outbreak started. This is because the illness is usually so mild that most people affected probably do not report it to their doctor. However, in Brazil it was thought there were over one and a half million cases in 2015, and in Columbia 25,000. Zika infections have been at a low level since 2018.

However, they have been cropping up from time to time across the world. The first European cases were reported in 2019, when three people in France who had no history of travel to Zika-endemic countries became infected.

## How could I become infected with Zika virus?

You can catch Zika virus if you travel to a country where there is known to be Zika virus infection, and are bitten by an infected mosquito. The weather in the UK is not warm enough for these mosquitoes to survive, so you cannot catch Zika virus from a bite in the UK.

Usually Zika virus transmission occurs by a mosquito bite. However, there are other ways in which it is, rarely, possible to become infected:

- Through sexual transmission, ie having sex with a person who is infected with Zika virus.
- Through blood donation from a person who is infected with Zika virus.
   (In the UK, people who have travelled to countries with Zika virus cannot give blood for 28 days to prevent this happening.)
- Through the placenta. It seems to be possible for pregnant mothers to pass the virus on to babies in the womb (uterus).

#### Is there a test for Zika virus?

A blood test can confirm whether you have Zika virus. It has to be sent away to a special laboratory which tests for rare infections. If you are pregnant, a test of your urine is also done. In the UK, your blood will only be tested if you have typical Zika virus symptoms and have returned from a country where Zika virus is known to be common within the previous two weeks.

Occasionally, tests on urine samples, semen and saliva may also be required.

#### How is Zika virus treated?

Normally no treatment at all is needed. If you have a headache or high temperature (fever), or aches and pains, a medicine such as paracetamol or ibuprofen may help. Drink plenty of fluids and generally take the measures you would with any other mild virus infection.

If you are pregnant and contract Zika virus, you will need extra check-ups and tests. See the section below about Zika virus in pregnancy.

## What are the complications of Zika virus?

Zika virus infection in pregnancy can cause babies to be born with a smaller head and less developed brain (microcephaly). It can also cause Guillain-Barré syndrome (GBS), an uncommon condition which affects the nerves of the limbs and body. Other complications are rare. Occasionally people infected with Zika virus may go on to have brain infections, such as meningitis.

# What should I do if I am pregnant or considering pregnancy?

Authorities in affected countries are advising women to avoid pregnancy during a Zika virus outbreak until there is more information about the risk.

For women in the UK, advice is as follows:

- If you are pregnant, avoid travel to a country known to have Zika virus. A list of affected countries is available and updated regularly on the Public Health England website and the European Centre for Disease Prevention and Control website (see under Further Reading, below). You should also consider postponing non-essential travel to countries where there has been a recent outbreak.
- If you are pregnant and you choose to travel to a country where
  there is a high risk of contracting Zika, you and your partner should
  use barrier contraception (eg, a condom) for vaginal, anal and oral
  sex, for the rest of the pregnancy.
- Similarly, if you are pregnant, avoid unprotected sex with a man who
  has visited a country affected by Zika virus for the rest of the
  pregnancy.

- let your GP, midwife or obstetrician know as soon as possible. An obstetrician is a doctor who specialises in pregnancy and childbirth. If you have, or have had, symptoms of Zika virus, a blood test and urine test will be arranged. You will have extra checks (for example, ultrasound scans) if you have recently travelled to a country with Zika virus. These will be carried out even if you did not have any symptoms of infection. This is a precaution because many people affected by Zika virus do not have symptoms and do not know they have had the illness. You and your baby will be monitored carefully through your pregnancy.
- If you have travelled to an area with Zika virus and have been considering getting pregnant, avoid doing so whilst travelling and use an effective barrier method for vaginal, anal and oral sex:
  - If you and your partner are both travelling, for three months after return or after the last possible Zika exposure.
  - If a male partner is travelling alone, for three months after return or after the last possible Zika exposure.
  - If a female partner is travelling alone, for two months after return or after the last possible Zika exposure.

'The last possible Zika exposure' refers to the date when you left the area, or the date when you last had unprotected sexual contact with a potentially infectious partner.

## How can I avoid Zika virus?

You can avoid Zika virus infection by **avoiding travelling to countries where it is known to occur**. This is particularly important if your immune system is not working properly (for example, if you are on chemotherapy). If you are travelling to a country which has Zika virus, take precautions to avoid being bitten by a mosquito. For example:

• Wear light clothing which **covers your arms and legs, both in the day** and the evening.

- Use a good mosquito repellent, and apply it regularly. Insect repellents containing the chemical N,N-diethylmetatoluamide (DEET) are the most effective. Re-apply the insect repellent after swimming. If you are using suntan lotion, use suntan lotion first and then apply the insect repellent over the suntan lotion. The repellent may make the sunscreen less effective, so use a sunscreen with sun protection factor (SPF) 30-50.
- If staying in buildings without mosquito screens on the windows and doors, **sleep under mosquito net**. Check there are no holes in the net and repair any if necessary.

Specific advice for prevention in pregnant women is discussed in the section above.

#### Zika virus research

Internationally, much work is being done to try to prevent the Zika virus spreading. Measures include:

- Research into a vaccine is taking place.
- Countries are sharing the information they gather about Zika virus and its complications.
- Journals are providing free access to studies done and articles written about Zika virus.
- Getting rid of mosquito breeding grounds. Mosquitoes breed in standing water, so areas or structures which allow water to stand are altered.
- Spraying areas with insecticide.
- Genetically altered mosquitoes have been produced. The idea is these mosquitoes breed with the population of infected mosquitoes and make them infertile. In this way the numbers of mosquitoes should drop.

## **Further reading**

Zika virus; Public Health England

- Zika virus; World Health Organization
- Basarab M, Bowman C, Aarons EJ, et al; Zika virus. BMJ. 2016 Feb 26;352:i1049. doi: 10.1136/bmj.i1049.
- The Lancet Zika Virus Resource Centre
- Free Zika Virus resources; British Medical Journal (BMJ)
- Zika Virus Infection; European Centre for Disease Prevention and Control (ECDC) (including epidemiological updates)
- Insect and tick bite avoidance; Travel Health Pro
- Zika Virus Infection and Pregnancy; Royal College of Obstetrics and Gynaecology, 2019
- Wolford RW, Schaefer TJ; Zika Virus.

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our conditions.

Authored by:	Peer Reviewed by: Dr Krishna Vakharia, MRCGP	
Originally Published:	Next review date:	Document ID:
19/11/2023	21/08/2023	doc_29200

View this article online at: patient.info/travel-and-vaccinations/zika-virus-leaflet Discuss Zika virus and find more trusted resources at Patient.



To find out more visit www.patientaccess.com or download the app





#### Follow us







