

Zika virus

Zika virus is a flavivirus that is transmitted through the bite of the Aedes mosquito. The same species of mosquito also transmits other infectious diseases such as dengue and chikungunya.

Is there a risk of contracting the Zika virus?

Anyone travelling (or living) in areas where mosquitoes are infected with Zika virus can become infected. These areas are in South and Central America, South-East Asia, Africa and islands in the Pacific (e.g. French Polynesia).

A map showing the prevalence of Zika virus is available on the [European Centre for Disease Prevention and Control website](#).

The spread of Zika virus via infected mosquitoes has not yet been confirmed in Europe. Most Europeans who have contracted Zika virus were infected in areas outside Europe (mostly in South and Central America) and started showing symptoms while travelling or after returning home. It is very rare that the Zika virus has been transmitted from an affected traveller to his or her partner during sexual intercourse.

Slovenia is the same as the rest of Europe - there are NO indigenous cases of Zika virus infection (i.e. patients who have been infected in Slovenia via a mosquito bite). However, imported cases have been detected in Slovenia.

What is the course of the Zika virus infection?

Often, the infection is completely asymptomatic - we are infected with the virus, but there are no signs of illness (such as fever, malaise). A person who has had an asymptomatic Zika virus infection will still have specific antibodies in the blood, which can be confirmed by microbiological tests.

A certain proportion (around 20%) develop symptoms and signs of Zika virus infection. The course of the disease is mild for most, with health problems usually resolving within a few days or a week at most. There are few reports of deaths due to Zika virus infection, and most of the patients who died had co-morbidities and/or immune system disorders.

Disease symptoms appear 3–12 days after the bite of an infected mosquito. The patient has:

- Fever and is feeling unwell;
- Headache and muscle and joint pain;
- Rash is less likely to occur;
- Pain behind eyes, conjunctivitis.

How do we know if we have contracted Zika?

The course of Zika virus infection is uncharacteristic, similar to many infectious diseases, and microbiological testing of serum and/or other infectious substances is needed for confirmation.

The doctor refers the patient's samples to a microbiology laboratory if there is reasonable suspicion (in the case of a patient with fever and other symptoms, if there is evidence of recent residence in areas where the virus is widespread).

There is only one laboratory in Slovenia that diagnoses Zika virus infection: The Zoonoses Diagnostic Laboratory and the WHO Laboratory at the Institute of Microbiology and Immunology, Faculty of Medicine, University of Ljubljana.

What is the course of treatment?

There are no medicines to prevent or cure Zika virus infection.

The patient is advised to rest, consume fluids to avoid dehydration with fever, and take medication to lower the severely feverish body temperature, relieve headache and muscle pain (e.g. paracetamol).

Avoid taking acetylsalicylic acid (aspirin) or non-steroidal antirheumatic drugs (e.g. ibuprofen, ketoprofen, naproxen, diclofenac, etc.) because of the increased risk of bleeding.

How can Zika virus infection be avoided?

There is no vaccine against Zika virus infection.

Anyone travelling to areas or countries where the Zika virus is spread from mosquitoes to humans is advised to protect themselves against mosquito bites (especially from sunrise to sunset, when mosquito bites are most frequent). Protection options are the following:

- **Use of repellents.** Read the instructions on how to use the repellent before applying it. Pay particular attention to the recommendations on applying sunscreens and repellents at the same time. DEET-based repellents are not recommended for children under three months of age and can be used by pregnant women.
- **Wear long-sleeved shirts and long trousers,** especially when the species of mosquito that carries the Zika virus (*Aedes*) is most active.
- **We sleep in rooms with nets on the windows** (mosquito nets) or rooms with air conditioning (closed windows).
- Travellers with immune deficiencies or serious chronic diseases and those who intend to travel with young children should consult their doctor before travelling or contact a travel clinic (there are clinics in all regional units of the National Institute of Public Health) to learn about the recommendations on the use of repellents and other preventive measures.
- Pregnant women are advised not to travel to areas where Zika virus infections are known to occur. A pregnant woman can become infected with Zika virus. Infections in early pregnancy lead to defects in the developing foetus such as microcephaly with consequent developmental disorders.

What should I do after travelling in areas with Zika virus?

Fever after travelling:

Travellers who, within three weeks of returning from their trip, show symptoms characteristic of Zika virus infection are advised to consult their doctor, who will refer them to an infectologist if appropriate.

Pregnant women:

Pregnant women who have travelled to areas where Zika virus is transmitted should inform their gynaecologist about their travel so that he or she can carry out any additional tests and monitor the pregnancy closely, in addition to a routine check-up.

Preventing sexual transmission of Zika virus:

Cases of sexual transmission of Zika virus have been described, most often from a man who has had symptomatic infection to a female partner during vaginal intercourse.

Men with Zika are advised to use a condom during sexual intercourse (vaginal, anal, oral) for 6 months after they have had the disease to prevent transmission to their partner. Alternatively, they should abstain from sexual intercourse for 6 months.

Men whose partners are pregnant are advised to use a condom or abstain from sex (vaginal, anal, oral) for the entire pregnancy.

Men who have travelled to areas where the Zika virus is circulating and have not fallen ill during or after their trip are also advised to continue to use a condom consistently during sexual intercourse (vaginal, anal, oral) for up to 6 months after their return.

The same recommendation applies to women who have travelled in Zika-affected areas - regardless of whether they have had a febrile illness during or after travel, we recommend consistent condom use for sexual intercourse (vaginal, anal, oral) for up to 6 months after returning home or after having had a Zika virus infection.

My colleague, with whom I share a room, returned a week ago from an area where Zika virus infections are occurring. I have heard that some people can be infected and not get sick. Is there a risk of me contracting Zika from my colleague as we are sitting in the same room every day?

Zika virus infection is asymptomatic in 80% of cases. Signs of illness may appear 3 to 14 days after a bite from an infected Aedes mosquito, the main vector of Zika virus. Zika virus is NOT transmitted through the air, coughing or sneezing, nor is it transmitted through normal social contact.

Therefore, you cannot get infected from a colleague with whom you share a workspace and have normal social contact, such as a handshake or a friendly hug. Nor can you get infected through door handles, phones or objects that a colleague has grabbed in front of you.

My partner returned a few days ago from an area where Zika virus infections are occurring. So far, he is healthy. How should he recognise the disease if it occurs? Can I catch it from him?

Only about one in five infected people develop symptoms and signs of Zika virus infection. Patients usually develop fever, malaise, headache, muscle and joint pain, pain behind the eyes and conjunctivitis, rash a few days after infection. The course of the disease is mild in most. Health problems usually disappear within a few days or at most after a week. Because the course of Zika virus infection is uncharacteristic, similar to many infectious diseases, microbiological testing is needed to confirm the disease.

Zika virus can also be transmitted through sex, so your partner should consistently use a condom, even if he or she is not ill. We recommend condom use for up to 6 months after returning from Zika virus areas, and for the entire pregnancy if you are pregnant.

Can I get Zika if I drink from the same glass as an infected person or share cutlery?

Although Zika virus has also been found in saliva, there is no evidence to date that the virus can be transmitted through saliva. Saliva contains certain substances that can inhibit the transmission of certain pathogens.

My neighbour has fallen ill with Zika virus infection. There are a lot of mosquitoes in our place. Are we, as his neighbours, at risk of contracting the infection?

Every patient infected with Zika virus is instructed to protect themselves from mosquito bites, precisely to prevent transmission from the patient to tiger mosquitoes. If the instructions are followed, the likelihood of the Zika virus spreading from the patient via mosquitoes to people living in the vicinity is negligible. This likelihood is further reduced by making sure mosquitoes don't bite us (repellents, use of protective nets on windows). The most important way to prevent mosquitoes from breeding around our homes is to keep the area around our homes tidy and regularly drain all standing water from flower pots, buckets, open bottles, tyres, etc., as residual water is an ideal breeding ground for mosquitoes. Tiger mosquitoes are poor fliers - they can usually fly distances of up to 300 m, no further.

If a tiger mosquito in Slovenia became infected (from an infected person) with Zika virus, what would this mean in case of transmission to other people?

It is certainly theoretically possible that Zika virus could be transmitted from an infected tiger mosquito to someone who is stung by an infected mosquito, but current estimates suggest that the risk of such an event occurring in Slovenia is extremely low, but not impossible.

The number of people who will travel to Slovenia infected with Zika virus is relatively small, they should be in the post-infection period when the virus is still present in the blood (see below, this period is relatively short) and it is during this period that they should be stung by a mosquito, the temperature of the environment should be high enough for the virus in the mosquito to multiply quickly enough to be successfully transmitted to another person. Several conditions would have to be met for successful transmission via a mosquito vector to actually occur.

What is the possibility of this?

The tiger mosquito is not the most suitable vector of Zika virus in Europe. In the tiger mosquito, which is present in Europe, the Zika virus slowly multiplies to the point where it is able to infect humans. Experts estimate that there is currently a very low probability of a major outbreak of Zika virus in most European countries that have a suitable vector of the *Aedes albopictus* (Slovenian tiger mosquito). This assessment also applies to Slovenia.

How long after human infection is it possible to transmit Zika virus to a mosquito?

The Zika virus is present in the patient's blood (which is a prerequisite for transmission from the patient to the mosquito in the bloodstream) for a few days to a maximum of 10 days.

Prolonged blood viral load has been described in a pregnant woman who became infected during pregnancy and transmitted Zika virus to the foetus.