

FREQUENTLY ASKED QUESTIONS ON ZIKA VIRUS

Updated: 25 March, 2016

What is Zika virus infection?

Zika virus infection is caused by the bite of an infected *Aedes* mosquito, usually causing rash, mild fever, conjunctivitis, and muscle pain.

The virus was isolated for the first time in 1947 in the Zika forest in Uganda. Since then, it has remained mainly in Africa, with small and sporadic outbreaks in Asia. In 2007, a major epidemic was reported on the island of Yap (Micronesia), where nearly 75% of the population was infected.

On 3 March 2014, Chile notified PAHO/WHO of autochthonous transmission of Zika virus on Easter Island, where the virus continued to be detected until June 2014.

In May 2015, the public health authorities of Brazil confirmed the transmission of Zika virus in the country's northeast. Since October 2015, other countries and territories of the Americas have reported the presence of the virus.

[See updated list.](#)

What are the symptoms?

The most common symptoms of Zika virus infection are exanthema (skin rash) and mild fever, usually accompanied by conjunctivitis, muscle or joint pain, and general malaise that begins few days after the bite of an infected mosquito.

One out of four infected people develops symptoms of the disease. Among those who do, the disease is usually mild and can last 2-7 days. Symptoms are similar to those of dengue or chikungunya, which are transmitted by the same type of mosquito.

Neurological and autoimmune complications are infrequent, but have been described in the outbreaks in Polynesia, in Brazil and, more recently, in other countries of the region. As the virus spreads in the Americas, giving us more experience with its symptoms and complications, it will be possible to characterize the disease better.

How is Zika virus transmitted?

Zika virus is transmitted to people through the bite of an infected *Aedes* mosquito. This is the same mosquito that transmits dengue and chikungunya. Recently other modes of transmission have been observed that are described in the following questions.

Can Zika virus be transmitted through donated blood?

Currently there is limited knowledge of Zika virus and the ways it can be transmitted. However, the following suggest it may present a risk to blood safety:

- The virus has been detected in blood donors in areas where Zika is circulating
- Transmission of related viruses (dengue, chikungunya and West Nile virus) by blood transfusion has been documented, and thus transmission of Zika virus is possible
- Brazilian health authorities have reported 2 cases of possible transmission of the virus by blood transfusion.

Studies are needed to assess the prevalence of the virus and of transmission through blood transfusion and blood products to better understand the risk Zika presents.

What precautions should be taken to ensure that the blood supply is safe in countries where Zika infection is occurring?

Specific measures recommended to prevent Zika infection should be part of an overall blood strategy based on the guidelines in PAHO's [Plan of Action for Universal Access to Safe Blood 2014-2019](#) for strengthening national blood programs. These guidelines recommend:

- Organizing blood services well and concentrating processes
- Implementing quality management programs throughout the transfusion chain and ensuring Good Manufacturing Practices;
- Ensuring that blood donation is voluntary, repeated, and from low-risk populations, and eliminating mandatory replacement donation;
- Ensuring the appropriate use of blood and blood products;
- Providing continuous training for blood services staff and blood products users
- Providing health surveillance, hemovigilance, and risk management.

Ideally the blood supply during a regional outbreak of Zika should be maintained by increasing blood collections in non-affected areas.

In non-affected areas, consideration may be given to deferring potential donors who have recently visited areas with ongoing transmission of Zika virus infection for 28 days after their departure from these areas.

[More information.](#)

Can it be transmitted through sexual contact?

The most common form of Zika transmission is through mosquito bites, but the virus has been isolated in semen, and cases of sexual transmission have been observed. Currently the available evidence is being analyzed to better understand the public health impact of sexual transmission of Zika.

The IHR Emergency Committee on Zika virus, at its meeting March 8, 2016, said that pregnant women should be advised not travel to areas of ongoing Zika virus outbreaks; pregnant women whose sexual partners live in or travel to areas with Zika virus outbreaks should ensure safe sexual practices or abstain from sex for the duration of their pregnancy.

[More information.](#)

What can be done to prevent sexual transmission?

All patients (male and female) with Zika virus infection and their sexual partners (particularly pregnant women) should receive information about the potential risks of sexual transmission of Zika virus, contraceptive measures and safer sexual practices, and should be provided with condoms when feasible.

Women who have had unprotected sex and do not wish to become pregnant because of concern with infection with Zika virus, should also have ready access to emergency contraceptive services.

Sexual partners of pregnant women living in or returning from areas where local transmission of Zika virus is known to occur, should use safer sexual practices or abstinence from sexual activity for the duration of the pregnancy.

[For more information.](#)

Can it be transmitted from mother to child?

There is more evidence on this type of transmission. Research is currently under way on the risk of mother-to-child transmission of the virus and its possible effects on babies. Pregnant women in general, and particularly those who develop symptoms of Zika virus infection, should be closely monitored by health providers.

For more information see: [Zika and pregnancy.](#)

Can mothers with Zika infection breastfeed their baby?

There are currently no documented reports of Zika virus being transmitted to infants through breastfeeding. In countries with ongoing transmission of Zika virus no adverse neurologic outcomes or severe diseases have been reported to date from infants with postnatally acquired Zika infection. Any change to this situation should be carefully monitored. In light of available evidence, the benefits of breastfeeding for the infant and mother outweigh any potential risk of Zika virus transmission through breast milk.

[More information.](#)

What treatment is there?

Treatment consists of relieving pain, fever, and any other symptom that inconveniences the patient. To prevent dehydration, it is recommended to control the fever, rest, and drink plenty of water. There is no vaccine or specific drug for this virus.

Can it cause death?

In the past, Zika had very limited geographical and demographic distribution, and there was no evidence that it caused death. However, in the current outbreak in the Region of the Americas, cases have been reported of more serious manifestations and complications that have sometimes resulted in death.

Who is at risk of Zika infection?

Anyone not previously exposed to the virus and who lives in an area where the mosquito is present, and where imported or local cases have been reported, may be infected. Since the Aedes mosquito is found throughout the Region (except in continental Chile and Canada), it is likely that outbreaks will occur in other countries that have not yet reported any cases.

How is Zika diagnosed?

Diagnosis is based on clinical symptoms and epidemiological circumstances (such as Zika outbreak in the patient's area or trips to areas where the virus is circulating).

Blood tests can help to confirm the diagnosis. Some (virological PCR tests) are useful in the first 3-5 days after the onset of symptoms, while others (serological tests) detect the presence of antibodies but are useful only after five days. Once it has been demonstrated that the virus is present in a given area or territory, confirmation of all cases is not necessary, and laboratory testing will be adjusted to routine virological surveillance of the disease.

Which is the difference between Zika, dengue, and chikungunya?

All these diseases present similar symptoms, but certain symptoms suggest one disease or another: Dengue usually presents with higher fever and more severe muscle pain. There can be complications when the fever breaks: attention should be paid to warning signs such as bleeding.

Chikungunya presents with higher fever and more intense joint pain, affecting the hands, feet, knees, and back. It can disable people, bending them over so that they cannot walk or perform simple actions such as opening a water bottle. Zika does not have clearly characteristic features, but most patients have skin rashes and some have conjunctivitis.

Is there a relationship between Guillain-Barré syndrome and Zika virus?

An increase in Guillain-Barré syndrome (GBS) has been observed in areas where a Zika virus epidemic has been documented (e.g., in French Polynesia and in a number of countries and territories in the Americas). Recent studies have documented this association.

GBS occurs when a person's immune system attacks itself, in particular affecting the cells of the nervous system. This process can be initiated by infection with various viruses or bacteria. The main symptoms include muscular weakness and tingling (paresthesia) in the arms and legs, and severe complications can occur if the respiratory muscles are affected. The most seriously ill patients need attention in intensive care units.

CIRCULATION OF ZIKA VIRUS

Which countries have reported cases of Zika in the Americas?

On 3 March 2014, Chile notified PAHO/WHO that it had confirmed a case of indigenous transmission of Zika virus on Easter Island, where the virus continued to be detected until June 2014.

In May 2015, the public health authorities of Brazil confirmed the transmission of Zika virus in the northeast of the country. Since October 2015, other countries and territories of the Americas have reported the presence of the virus.

[See the updated list.](#)

What causes rapid transmission in an area?

There are two factors for rapid transmission (documented in other countries): (1) Since this is a new virus to the Americas, the entire population is susceptible, lacking defenses to Zika virus; and (2) The Aedes mosquito is widespread in the Region, given the climatic conditions, temperature, and humidity in tropical countries.

Is it advisable to travel to countries where Zika virus is circulating?

PAHO/WHO does not recommend any travel or international trade restrictions related to Zika virus outbreaks. Travelers are advised to take the suggested precautions to prevent mosquito bites.

Pregnant women should be advised not travel to areas of ongoing Zika virus outbreaks; pregnant women whose sexual partners live in or travel to areas with Zika virus outbreaks should ensure safe sexual practices or abstain from sex for the duration of their pregnancy. Travelers to areas with Zika virus outbreaks should be provided with up to date advice on potential risks and appropriate measures to reduce the possibility of exposure to mosquito bites and, upon return, should take appropriate measures, including safe sex, to reduce the risk of onward transmission.

More information for [travelers to areas with Zika circulation.](#)

How many Zika cases have been reported in the Region of the Americas?

Countries begin reporting when they detect the circulation of the virus in their territories. Maintaining a case count is difficult because symptoms of the disease tend to be mild and not everyone affected is seen by health services. What is most important is to detect the circulation of the virus, strengthen the response of health services, and step up surveillance of serious cases and complications.

For more information, [see the latest Zika situation.](#)

PREVENTION

What measures should be taken to prevent Zika virus infection?

Prevention involves reducing mosquito populations and avoiding bites, which occur mainly during the day. Eliminating and controlling Aedes aegypti mosquito breeding sites reduces the chances that Zika, chikungunya, and dengue will be transmitted. An integrated response is required, involving action in several areas, including health, education, and the environment.

To eliminate and control the mosquito, it is recommended to:

- Avoid allowing standing water in outdoor containers (flower pots, bottles, and containers that collect water) so that they do not become mosquito breeding sites.
- Cover domestic water tanks so that mosquitoes cannot get in.
- Avoid accumulating garbage: Put it in closed plastic bags and keep it in closed containers.
- Unblock drains that could accumulate standing water.
- Use screens and mosquito nets in windows and doors to reduce contact between mosquitoes and people.

To prevent mosquito bites, it is recommended that people who live in areas where there are cases of the disease, as well as travelers and, especially, pregnant women should:

- Cover exposed skin with long-sleeved shirts, trousers, and hats
- Use repellents recommended by the health authorities (and apply them as indicated on the label)
- During the day, sleep under mosquito nets.

People with symptoms of Zika, dengue, or chikungunya should visit a health center.

[More information.](#)

What is PAHO/WHO's response in the Americas?

PAHO/WHO is working actively with the countries of the Americas to develop or maintain their ability to detect and confirm cases of Zika virus infection, treat people affected by the disease, and implement effective strategies to reduce the presence of the mosquito and minimize the likelihood of an outbreak. PAHO/WHO's support has three main pillars:

Prevention

- Controlling the vector by working actively with national authorities, partners and communities to eliminate mosquito populations.

Detection

- Building the capacity of laboratories to detect the virus in a timely fashion (together with other collaborating centers and strategic partners).
- Monitoring the geographic expansion of the virus and the emergence of complications and serious cases through surveillance of events and country reporting through the International Health Regulations channel.

Response

- Preparing recommendations for the clinical care and monitoring of persons with Zika virus infection, in collaboration with professional associations and experts from the countries.
- Advising on risk communication to respond to the introduction of the virus in the country.
- Helping countries to buy insecticides and larvicides for vector control, medicines for treating patients with complications; and laboratory supplies for diagnostic, through PAHO Strategic Fund.

For these three pillars, PAHO/WHO is supporting initiatives by health authorities and academic and research institutions aimed at learning more about the characteristics of the virus, its impact on health, and the possible consequences of infection.

See [PAHO Strategy for Enhancing National Capacity to Respond to Zika virus Epidemic in the Americas.](#)