

Zika Virus Questions and Answers

What is Zika virus disease (Zika)?

Zika is a disease caused by Zika virus that is spread to people primarily through the bite of an infected *Aedes* species mosquito. The most common symptoms of Zika are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild with symptoms lasting for several days to a week.

What are the symptoms of Zika?

About 1 in 5 people infected with Zika will get sick. For people who get sick, the illness is usually mild. For this reason, many people might not realize they have been infected.

The most common symptoms of Zika virus disease are fever, rash, joint pain, or conjunctivitis (red eyes). Symptoms typically begin 2 to 7 days after being bitten by an infected mosquito.

How is Zika transmitted?

Zika is primarily transmitted through the bite of infected *Aedes* mosquitoes. Mosquitoes become infected when they bite a person already infected with the virus. Infected mosquitoes can then spread the virus to other people through bites.

The virus can also be transmitted from a pregnant mother to her baby during pregnancy or around the time of birth. We do not know how often Zika is transmitted from mother to baby during pregnancy or around the time of birth.

Finally, sexual transmission of Zika virus has been documented in a few instances. The first case of locally transmitted Zika virus in the United States occurred in Dallas County likely due to sexual contact between an infected person returning from an affected country and their sexual partner.

What is the risk to Houston?

Aedes mosquitoes are prevalent in Texas, especially on the Gulf Coast. Because Houston has a strong economic relationship with Central and South America, including oil and gas, travel, and shipping, Houston is at a higher risk than many other major cities in Houston for Zika. Currently, only travel-associated cases have been found in the Houston-area; however, these cases have the potential to transmit the disease via mosquitoes to other humans, leading to the disease potentially becoming an epidemic in the area.

With the recent outbreaks, the number of Zika virus disease cases among travelers visiting or returning to the United States will likely increase. These imported cases may result in local spread of the virus in some areas of the United States.

Who is at risk of being infected?

Anyone who is living in or traveling to an area where Zika virus is found who has not already been infected with Zika virus is at risk for infection, including pregnant women. With recently documented sexual transmission, sexual partners of infected persons may also be at risk of being infected.

What countries have Zika?

Specific areas where Zika virus transmission is ongoing are often difficult to determine and are likely to change over time. Currently, Central and South American countries are experiencing Zika outbreaks. The CDC maintains up-to-date travel advisories for affected countries.

What can people do to prevent becoming infected with Zika?

Currently, there is no vaccine to prevent Zika. The best way to prevent diseases spread by mosquitoes is to avoid being bitten. Protect yourself and your family from mosquito bites.

- Avoid travel to counties with Zika virus outbreaks.
- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Use Environmental Protection Agency (EPA)-registered insect repellents. All EPA-registered insect repellents are evaluated for effectiveness.
 - Always follow the product label instructions.
 - Reapply insect repellent as directed.
 - Do not spray repellent on the skin under clothing.
 - If you are also using sunscreen, apply sunscreen before applying insect repellent.
- If you have a baby or child:
 - Do not use insect repellent on babies younger than 2 months of age.
 - Dress your child in clothing that covers arms and legs, or
 - Cover crib, stroller, and baby carrier with mosquito netting.
 - Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
 - Adults: Spray insect repellent onto your hands and then apply to a child's face.
- Treat clothing and gear with permethrin or purchase permethrin-treated items.
 - Treated clothing remains protective after multiple washings. See product information to learn how long the protection will last.
 - If treating items yourself, follow the product instructions carefully.
 - Do not use permethrin products directly on skin. They are intended to treat clothing.
- If you have sexual contact with a person known to have the virus or who has returned from an affected area, use condoms for 3 weeks to prevent the spread of the virus.

What is the treatment for Zika?

There is no vaccine or specific medicine to treat Zika virus infections.

Treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine such as acetaminophen to reduce fever and pain.
- Do not take aspirin or other non-steroidal anti-inflammatory drugs.
- If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.

How is Zika diagnosed?

- See your healthcare provider if you develop symptoms (fever, rash, joint pain, red eyes). If you have recently traveled, tell your healthcare provider.
- Your healthcare provider may order blood tests to look for Zika or other similar viral diseases like dengue or chikungunya.

What should I do if I have Zika?

Treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine such as acetaminophen to reduce fever and pain.
- Do not take aspirin or other non-steroidal anti-inflammatory drugs.
- Use insect repellent to prevent transmission to mosquitos.

During the first week of infection, Zika virus can be found in the blood and passed from an infected person to another person through mosquito bites. An infected mosquito can then spread the virus to other people. To help prevent others from getting sick, avoid mosquito bites for 3 weeks after illness onset.

See your healthcare provider if you are pregnant and develop a fever, rash, joint pain, or red eyes within 2 weeks after traveling to a country where Zika virus cases have been reported. Be sure to tell your health care provider where you traveled.

Is there a vaccine to prevent or medicine to treat Zika?

No. Currently, there is no vaccine to prevent infection or medicine to treat Zika.

Are you immune for life once infected?

Once a person has been infected, he or she is believed to be protected from future infections.

Does Zika virus infection in pregnant women cause birth defects?

There have been reports of a serious birth defect of the brain called [microcephaly](#) (a condition in which a baby's head is smaller than expected when compared to babies of the same sex and age) and other poor pregnancy outcomes in babies of mothers who were infected with Zika virus while pregnant. Knowledge of the link between Zika and these outcomes is evolving, but until more is known, we recommend special precautions for the following groups:

- Women who are pregnant (in any trimester):
 - Postpone travel to any area where Zika virus transmission is ongoing.
 - If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.
- Women who are trying to become pregnant:
 - Before you travel, talk to your doctor about your plans to become pregnant and the risk of Zika virus infection.

Strictly follow steps to prevent mosquito bites during your trip.

Does Zika virus infection cause Guillain-Barré syndrome (GBS)?

Guillain-Barré syndrome (GBS) is a rare disorder where a person's own immune system damages the nerve cells, causing muscle weakness and sometimes, paralysis. These symptoms can last a few weeks or several months. While most people fully recover from GBS, some people have permanent damage and in rare cases, people have died.

We do not know if Zika virus infection causes GBS. It is difficult to determine if any particular pathogen "caused" GBS. The Brazil Ministry of Health is reporting an increased number of people affected with GBS. More work is being done to determine if Zika and GBS are related.

Is this a new virus?

No. Outbreaks of Zika previously have been reported in tropical Africa, Southeast Asia, and the Pacific Islands. Zika virus likely will continue to spread to new areas. In May 2015, the Pan American Health Organization issued an alert regarding the first confirmed Zika virus infection in Brazil.

Is there currently transmission occurring in the United States?

To date, local transmission of Zika virus by mosquitoes has not been identified in the continental United States. Healthcare providers are required to report suspected cases to their state or local health departments to facilitate diagnosis and mitigate the risk of local transmission. Limited local transmission may occur in the mainland United States, but it's unlikely that we will see widespread transmission of Zika in the mainland United States.

What is Houston doing about Zika?

The Houston Health Department held a planning meeting on January 29th with regional partners, including blood banks, healthcare providers, petrochemical companies, mosquito control specialists, and

others to begin developing plans for pre-emptively preparing for and preventing the transmission of Zika virus in the Houston-area. The Houston Health Department will lead workgroup efforts following this meeting to address domains such as: travelers returning from affected areas; enhanced surveillance of potential cases; laboratory testing by the department's public health laboratory; response to local transmission and a potential epidemic; and ensuring a safe and adequate blood supply for the region.

Most importantly, the Houston Health Department is working to strengthen surveillance efforts with healthcare partners and the general public to ensure we maintain situational awareness of this condition. At the forefront of these efforts are: 1) ensuring our public health laboratory is prepared to conduct confirmatory testing for the virus; and 2) expanding our surveillance and investigation efforts for epidemiology.

Additional Resources

Houston Health Department –

http://www.houstontx.gov/health/Epidemiology/Zika_Virus.html

(832) 393-5080

Harris County Mosquito Control District –

http://www.hcphe.org/divisions_and_offices/mosquito_control

(713) 440-4800

Texas Department of State Health Services –

<https://www.dshs.state.tx.us/idcu/disease/arboviral/zika/>

(512) 776-7676

Centers for Disease Control and Prevention –

<http://www.cdc.gov/zika/index.html>

(800) 232-4636