

ZIKA VIRUS

Lexile 670L

In early 2015, many people in Brazil became sick from the **Zika** (ZEE-kuh) **virus**. A virus is very tiny and causes an illness. A virus causes the common cold. The Zika virus causes Zika virus disease, or Zika. Zika did not seem serious when it first appeared. Most people with Zika did not get very sick. They had only a rash and a fever. Others also had some aches and pains. Most were better in a few days.

However, Zika is very dangerous for pregnant women. The virus can attack the baby growing inside a pregnant woman. It can affect the baby's brain. In 2016, the World Health Organization (WHO) said the spread of the Zika virus was a world health emergency.

Origins of Zika

Doctors first identified the Zika virus in Uganda in 1947. Uganda is a country in Africa. Doctors discovered the virus in a monkey in the Zika Forest. The virus was first found in people in 1952. It later spread from Africa to Asia. It was common across Africa and Asia for many years.

The first big **outbreak** of Zika occurred in 2007. An outbreak is a sudden and fast rise in the number of cases of a certain illness. This outbreak occurred on an island in the western Pacific Ocean.

A second outbreak occurred in Brazil in 2015. Brazil is a country in South America. Millions of people in Brazil became sick with a "mystery disease." They had a rash, a fever, and achy bones. Doctors later identified the disease as Zika.

Zika then spread from Brazil to other countries in South America. In 2016, it spread north into Mexico and the United States. The quick spread of Zika caused WHO to say it was a world health emergency.

How Zika Spreads

Zika is caused by the Zika virus. A virus is not alive. It cannot move on its own. A virus needs wind, water, food, or an organism to carry it around. An organism is a living thing. To grow and spread, a virus must get inside an organism's **cells**. Cells are the smallest living parts of an organism.

Zika is usually spread by mosquitoes. First, a mosquito feeds on the blood of a person **infected** (sickened) with the virus. The infected blood moves into the mosquito's stomach. Then the virus enters the mosquito's bloodstream. It moves throughout the mosquito's body in its blood. The virus makes its way into the mosquito's **saliva**. Saliva is a watery liquid in an organism's mouth. Next, the mosquito bites another person. The saliva in its bite moves the virus into the person's blood.

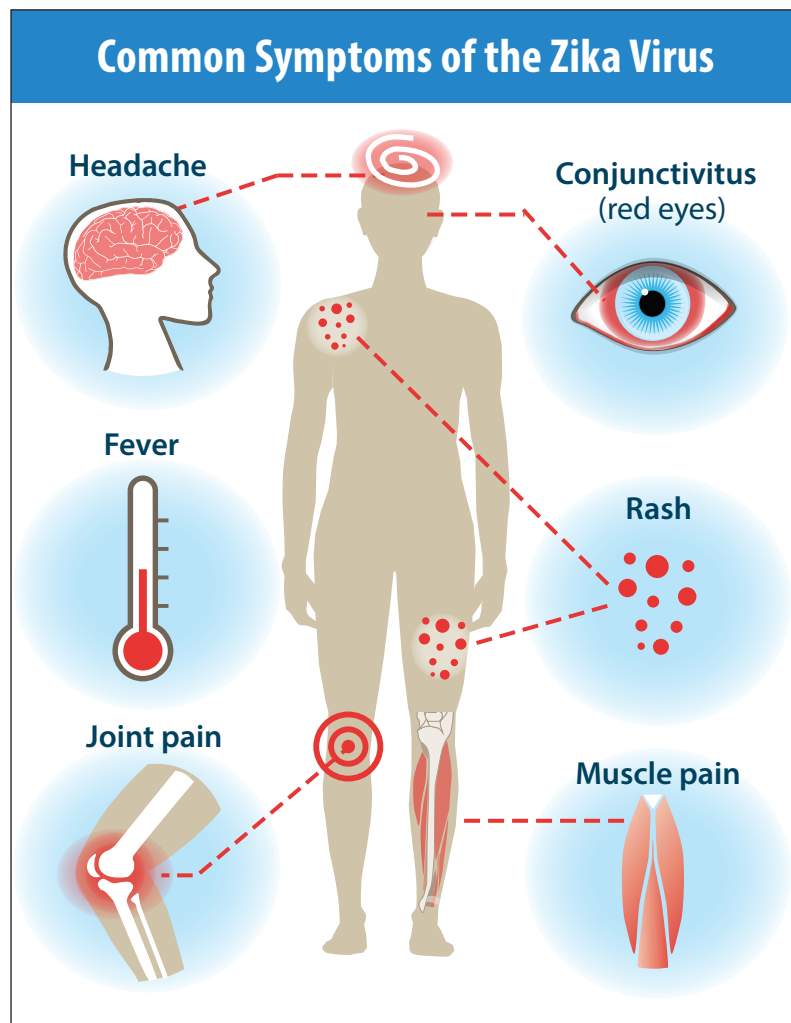


Illustration of the most common symptoms of the Zika virus.

Once it gets into a person's blood, the virus hooks itself to a cell. The virus takes control of the cell. The cell stops working properly. It begins making copies of the virus. These new viruses then kill the cell. The cell breaks open when it dies. This releases the new viruses into the person's blood. The blood carries the new viruses to other cells. The whole process then begins again. When many cells become infected with the virus, people begin to feel sick.

Symptoms

Some people who have Zika have no **symptoms**. Symptoms are signs of an illness. Others have several symptoms. One common symptom is a rash. The rash looks like little red bumps on the skin. Another common symptom is a fever. A fever is a higher-than-normal body temperature. Red eyes and headaches are common with Zika. Some people have pain in their muscles or joints (where two bones meet).

Zika symptoms last between two and seven days. Zika has no cure. People just need time to get better. Doctors tell people to rest and drink plenty of water. People may take medicine to help their fever go down. They also may take medicine to make sore bones and headaches feel better.

Serious Effects

Zika may not seem dangerous. However, it can have serious effects. During the 2015 outbreak in Brazil, many pregnant women got the virus. Most of these women were better in a few days. However, thousands of them later gave birth to babies with serious **birth defects** (problems with the way a baby forms). One of the defects is called **microcephaly** (my-crow-SEH-fuh-lee). Babies with microcephaly have a head and brain that are smaller than they should be.

Doctors now believe Zika can cause microcephaly. They think the virus can attack a baby that is still forming inside its mother. As a result, the baby's head and brain may not form properly. Zika can also cause eye damage and joint problems in developing babies.

Not all pregnant women who get Zika have babies with microcephaly. However, getting Zika while pregnant increases the chances.

Prevention

People can take steps to prevent Zika infection. They should wear pants and long sleeves in areas with many mosquitoes. They should also wear insect repellent. These "bug sprays" keep mosquitoes away. People should keep screens in windows and doors. They should get rid of standing water near their homes. Mosquitoes may lay eggs in standing water.

Bibliography

Books

Edwards, Sue Bradford. *The Zika Virus*. Adobo Publishing, 2016. The Zika virus is described in detail. Includes information about the virus, its spread, and its treatment along with sidebars and maps.

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Stevenson, John. *All You Need to Know about the Zika Virus*. John Stevenson, 2016. An overview of the Zika virus is presented.

Periodicals

McNeil, Donald G. Jr., et al. "Short Answers to Hard Questions about Zika Virus." *The New York Times*, 29 July 2016, www.nytimes.com/interactive/2016/health/what-is-zika-virus.html?_r=0. Accessed 7 Feb. 2017. Answers to nineteen questions about Zika are provided.

Websites

"Zika Virus." *Centers for Disease Control and Prevention*, 2 Feb. 2017, www.cdc.gov/zika/. Accessed 7 Feb. 2017. The CDC's overview on the Zika virus is provided here. Includes sections on symptoms, testing, and treatment; health effects and risks; prevention; and pregnancy.

"Zika Virus." *World Health Organization*, 6 Sept. 2016, www.who.int/mediacentre/factsheets/zika/en/. Accessed 7 Feb. 2017. The WHO fact sheet on the Zika virus is provided here. Includes signs and symptoms, treatment, and prevention.

■ By Lindsay Rohland

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COMPREHENSION TEST

Multiple-Choice Questions

1. Where did doctors first identify the Zika virus?

- A. Asia
 - B. Brazil
 - C. Mexico
 - D. Uganda
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2. How is Zika usually spread?

- A. on food
 - B. in water
 - C. in the air
 - D. by mosquitoes
-

3. What is a common symptom of Zika?

- A. a rash
 - C. coughing
 - D. sneezing
 - B. a runny nose
-

Fill-in-the-Blank Questions

4. A(n) _____ is a sudden and fast rise in the number of cases of a certain illness.
5. Some people who have Zika have no _____, or signs of an illness.
6. Babies with _____ have a head and brain that are smaller than they should be.

COMPREHENSION TEST ANSWERS

Multiple-Choice Questions

1. Where did doctors first identify the Zika virus?

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 - D. Uganda**
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Fill-in-the-Blank Questions

- 4. A(n) **outbreak** is a sudden and fast rise in the number of cases of a certain illness.
- 5. Some people who have Zika have no **symptoms**, or signs of an illness.
- 6. Babies with **microcephaly** have a head and brain that are smaller than they should be.