

# Zika Virus Infection (Zika) And Pregnancy

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## What we know

- Pregnant women can be infected with Zika virus.
  - The primary way that pregnant women get Zika virus is through the bite of an infected mosquito.
  - Zika virus can be spread by a man to his sex partners.
- A pregnant woman can pass Zika virus to her fetus.
  - Zika virus can be passed from a pregnant woman to her fetus during pregnancy or at delivery.
- The CDC has recommended that women who are pregnant should not travel to any area where Zika virus is spreading.
  - Numerous areas have been affected by Zika virus, including Mexico, the Caribbean, Central America, and parts of South America. Visit <http://wwwnc.cdc.gov/travel/page/zika-travel-information> for a detailed list of affected countries.
  - Currently, there have been no cases of local mosquito-borne Zika virus transmission in the continental US states.

## What we do not know

- If a pregnant woman is exposed
  - We don't know how likely she is to get Zika.
- If a pregnant woman is infected
  - We don't know how the virus will affect her or her pregnancy.
  - We don't know how likely it is that Zika will pass to her fetus.
  - We don't know if the fetus is infected, if the fetus will develop birth defects.

- We don't know when in pregnancy the infection might cause harm to the fetus.
- We don't know whether her baby will have birth defects.
- We don't know if sexual transmission of Zika virus poses a different risk of birth defects than mosquito-borne transmission.

## **Zika and microcephaly**

Since May 2015, Brazil has experienced a significant outbreak of Zika virus. In recent months, Brazilian officials reported an increase in the number of babies born with microcephaly. Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that might not have developed properly.

Since these initial reports of a link between Zika and microcephaly, researchers across the world began working to study the link between Zika during pregnancy and microcephaly. In a recent article, CDC scientists announced that there is now enough evidence to conclude that Zika virus infection during pregnancy is a cause of microcephaly and other severe fetal brain defects and has been linked to problems in infants, including eye defects, hearing loss, and impaired growth. Scientists are studying the full range of other potential health problems that Zika virus infection during pregnancy may cause.

## **Other possible causes of microcephaly**

Microcephaly can happen for many reasons. Some babies have microcephaly because of

1. Changes in their genes
2. Certain infections during pregnancy
3. A woman being close to or touching toxins during pregnancy

Recent media reports have suggested that a pesticide called pyriproxyfen might be linked with microcephaly. Pyriproxyfen has been approved for the control of disease-carrying mosquitoes by the World Health Organization. Pyriproxyfen is a registered pesticide in Brazil and other countries, it has been used for decades, and it has not been linked with microcephaly. In addition, exposure to pyriproxyfen would not explain recent study results showing the presence of Zika virus in the brains of babies born with microcephaly.

### **Zika and Other Birth Outcomes**

In addition to microcephaly, other problems have been detected among fetuses and infants infected with Zika virus before birth, such as eye defects, hearing loss, and impaired growth. Although Zika virus is a cause of microcephaly and other severe fetal brain defects and has been linked with these other problems in infants, there is more to learn. Researchers are collecting data to better understand the extent Zika virus' impact on mothers and their children.

### **Future Pregnancies**

Based on the available evidence, we think that Zika virus infection in a woman who is not pregnant would not pose a risk for birth defects in future pregnancies after the virus has cleared from her blood. From what we know about similar infections, once a person has been infected with Zika virus, he or she is likely to be protected from a future Zika infection.

### **How To Protect Yourself**

#### **1. Avoid travel to an area with Zika**

- Until we know more, CDC recommends special precautions for pregnant women. Women who are pregnant should not travel to any area where Zika virus is spreading.

- If you must travel to one of these areas, talk to your healthcare provider first and strictly follow steps to prevent mosquito bites during your trip.

## **2. Take steps to prevent mosquito bites**

- 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. When used as directed, these insect repellents are proven safe and effective even for pregnant and breastfeeding women. For a list of EPA registered insect repellents visit: <http://www.epa.gov/insect-repellents/find-insect-repellent-right-you>
- Remove or stay away from mosquito breeding sites, like containers with standing water.
- Visit CDC's website for more information about preventing mosquito bites at: <http://wwwnc.cdc.gov/travel/page/avoid-bug-bites>

## **3. Take steps to prevent getting Zika through sex**

- Until more is known, pregnant women with male sex partners who have lived in or traveled to an area with Zika virus should either use condoms the right way, every time, for vaginal, anal, or oral (mouth-to-penis) sex or not have sex during the pregnancy.
- If a pregnant woman is concerned that her male partner may have or had Zika virus infection, she should talk to her healthcare provider. She should tell her healthcare provider about her male partner's travel history, including how long he stayed, whether or not he took steps to prevent getting mosquito bites, and if she had sex with him without a condom since his return.
- Women trying to get pregnant and their male partners should talk to their healthcare provider before traveling to areas with Zika. Because

sexual transmission is possible, both men and women should strictly follow steps to prevent mosquito bites during the trip.

#### 4. See a healthcare provider

- Pregnant women who have recently traveled to an area with Zika should talk to a healthcare provider about their travel even if they don't feel sick.
- It is especially important that pregnant women see a doctor if they develop a fever, rash, joint pain, or red eyes during their trip or within 2 weeks after traveling to an area where Zika has been reported. They should tell the doctor where they traveled.
- CDC has guidance to help doctors decide what tests are needed for pregnant women who may have been exposed to Zika.

#### Where can I learn more?

Visit <http://www.cdc.gov/zika/pregnancy> for more information about Zika and Pregnancy.

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Adapted from: CDC. Zika and Pregnancy: Question and Answers.  
<http://www.cdc.gov/zika/pregnancy/question-answers.html>

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