



ZIKA 101

Updated May 9, 2017



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

INTRODUCTION

What is Zika?

- Zika virus is spread to people primarily through the bite of an infected *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*).
- Many people infected with Zika virus won't have symptoms or will only have mild symptoms.
- Zika virus infection during pregnancy can cause microcephaly and other severe brain defects.



Where has Zika been found?

- Before 2015, Zika outbreaks occurred in Africa, Southeast Asia, and the Pacific Islands.
- Currently outbreaks are occurring in many countries and territories.

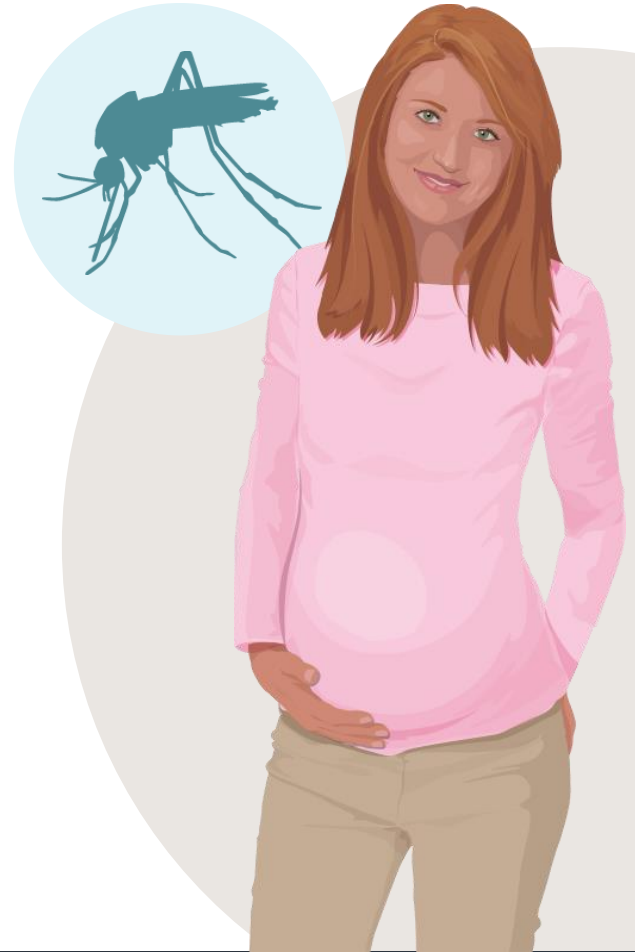


<http://www.cdc.gov/zika/geo/index.html>

SPREAD AND SYMPTOMS

How is Zika spread?

- Zika can be spread through
 - » Mosquito bites
 - » From a pregnant woman to her fetus
 - » Sex with an infected person
 - » Laboratory exposure
- Zika may be spread through blood transfusion.
- No reports of infants getting Zika through breastfeeding.



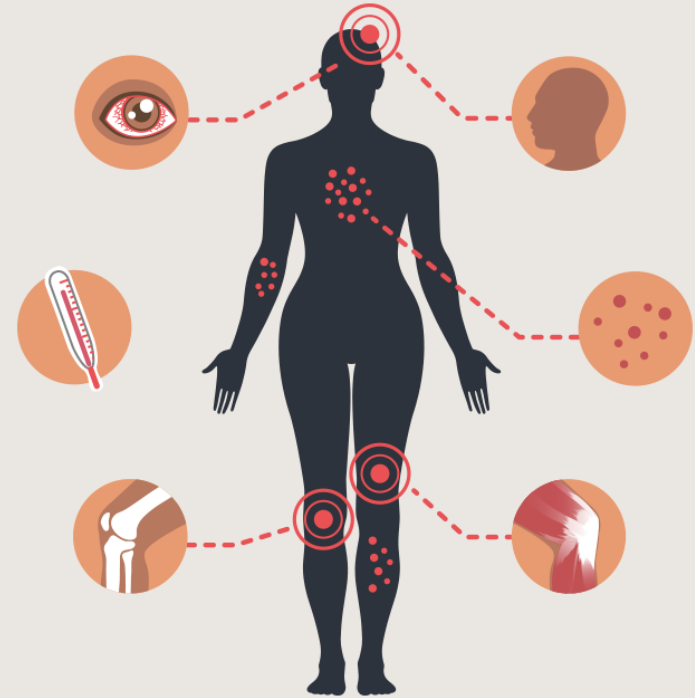
How does Zika affect people?

- Many people with Zika will not have symptoms or will only have mild symptoms.
- Symptoms last several days to a week.
- People usually don't get sick enough to go to the hospital.
- People very rarely die of Zika.



What are the symptoms?

- For people with symptoms, the most common symptoms of Zika are
 - » Fever
 - » Rash
 - » Headache
 - » Joint pain
 - » Conjunctivitis (red eyes)
 - » Muscle pain



ZIKA AND PREGNANCY

How can Zika affect pregnancies?

- Zika virus can pass from a pregnant woman to her fetus during pregnancy or around the time of birth.
- It is not known how often this happens.



How can Zika affect pregnancies?

- Infection during pregnancy can cause damage to the brain, microcephaly, and congenital Zika syndrome
- Linked to other problems, such as miscarriage, stillbirth, and birth defects
- No evidence that past infection will affect future pregnancies once the virus has cleared the body



How can Zika affect pregnancies?

- Congenital Zika syndrome
 - » Distinct pattern of birth defects in fetuses and infants of women infected during pregnancy
 - » Associated with 5 types of birth defects not seen or rarely seen with other infections during pregnancy
 - Severe microcephaly (small head size) resulting in a partially collapsed skull
 - Decreased brain tissue with brain damage
 - Damage to the back of the eye with a specific pattern of scarring and increased pigment
 - Limited range of joint motion, such as clubfoot
 - Too much muscle tone restricting body movement soon after birth



Assessing pregnant women for possible Zika exposure

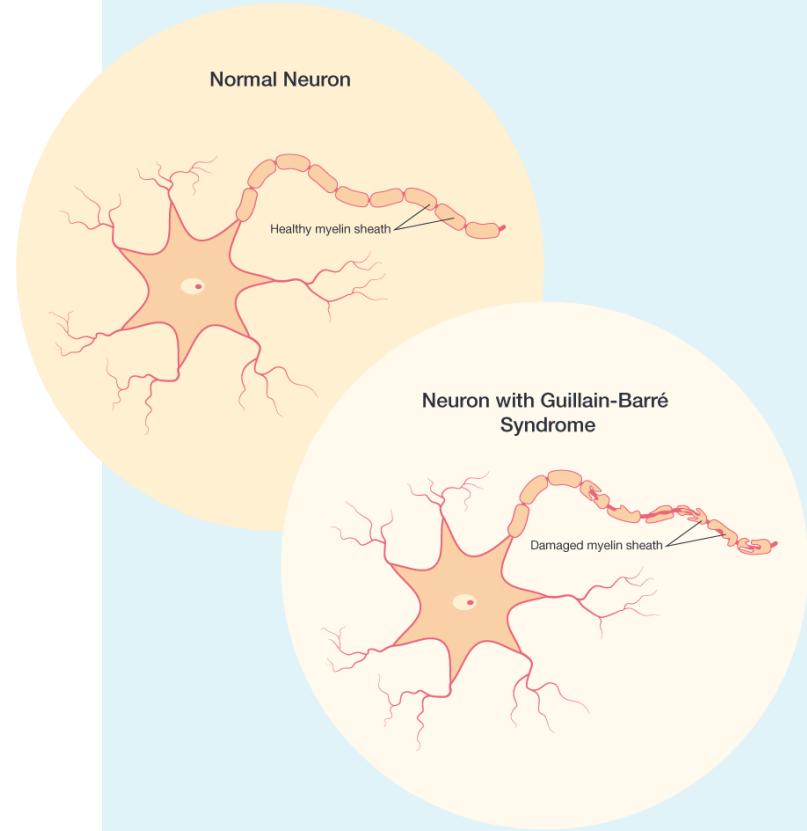
- At each prenatal care visit, all pregnant women should be asked if they
 - » Traveled to or live in an area with risk of Zika
 - » Had sex without a condom with a partner who lives in or traveled to an area with risk of Zika



GUILLAIN- BARRÉ SYNDROME

Does Zika cause Guillain-Barré syndrome (GBS)?

- GBS is an uncommon sickness of the nervous system in which a person's own immune system damages the nerve cells, causing muscle weakness, and sometimes, paralysis.
- GBS is strongly associated with Zika but only a small proportion of people with recent Zika infection get GBS.
- CDC is continuing to investigate the link between GBS and Zika to learn more.



TESTING

How is Zika diagnosed?

- A doctor or other healthcare provider will ask about any recent travel and any signs and symptoms.
- A blood or urine test can confirm a Zika infection.



Who should be tested for Zika?

- Anyone who has or recently had Zika symptoms
 - » And lives in or traveled to any area with risk of Zika, or
 - » Had unprotected sex with a partner who lives in or traveled to any area with risk of Zika



Who should be tested for Zika?

- All pregnant women (regardless of symptoms) who
 - » Live in or recently traveled to an area with risk of Zika that has a CDC Zika travel notice, or
 - » Had unprotected sex with a partner who lives in or traveled to an area with risk of Zika that has a CDC Zika travel notice
- Pregnant women who live in or recently traveled to an area with risk of Zika but **without** a CDC Zika travel notice
 - » If they develop symptoms of Zika, or
 - » If their fetus has abnormalities on an ultrasound that may be related to Zika infection



Testing babies for Zika

CDC recommends laboratory testing for

- All infants born to mothers with laboratory evidence of Zika virus infection during pregnancy
- Infants who have abnormal clinical or neuroimaging findings suggestive of congenital Zika syndrome and a mother with a possible exposure to Zika virus, regardless of maternal Zika virus testing results



WHAT TO DO IF YOU GET INFECTED

How is Zika treated?

- There is no specific medicine or vaccine for Zika virus infection.
- Treat the symptoms
 - » Rest
 - » Drink fluids to prevent dehydration
 - » Do not take aspirin or other non-steroidal anti-inflammatory drugs (NSAIDS)
 - » Take acetaminophen (Tylenol®) to reduce fever and pain



What to do if you have Zika

- Protect yourself from mosquito bites. During the first week of illness, Zika virus can be found in blood.
- The virus can be passed from an infected person to a mosquito through bites.
- An infected mosquito can spread the virus to other people.



SURVEILLANCE

Reporting of Zika in the United States

- Healthcare providers should report cases to their local, state, or territorial health department.
- State and territorial health departments are encouraged to report confirmed cases to CDC through ArboNET, the national surveillance system for arboviral diseases.
- Pregnant women with any lab evidence of possible Zika virus infection should be reported to the US Zika Pregnancy Registry.



For the most recent case counts, visit <https://www.cdc.gov/zika/geo/united-states.html>.

Zika Pregnancy Registries

US Zika Pregnancy
Registry



Zika Active Pregnancy
Surveillance System
(Puerto Rico)



Proyecto Vigilancia de
Embarazadas con Zika
(Colombia)



US Zika Pregnancy Registry

- CDC established the US Zika Pregnancy Registry to collect information and learn more about pregnant women in the US with Zika and their infants.
- Data will be used to
 - » Update recommendations for clinical care
 - » Plan for services for pregnant women and families affected by Zika
 - » Improve prevention of Zika infection during pregnancy
- Zika Active Pregnancy Surveillance System is used in Puerto Rico.



<https://www.cdc.gov/zika/hc-providers/registry.html>

<https://www.cdc.gov/zika/public-health-partners/zapss.html>

PREVENTION

Protect from mosquito bites

Zika is primarily spread through the bite of an infected *Aedes aegypti* or *Ae. albopictus* mosquito. Take steps to protect yourself and others.



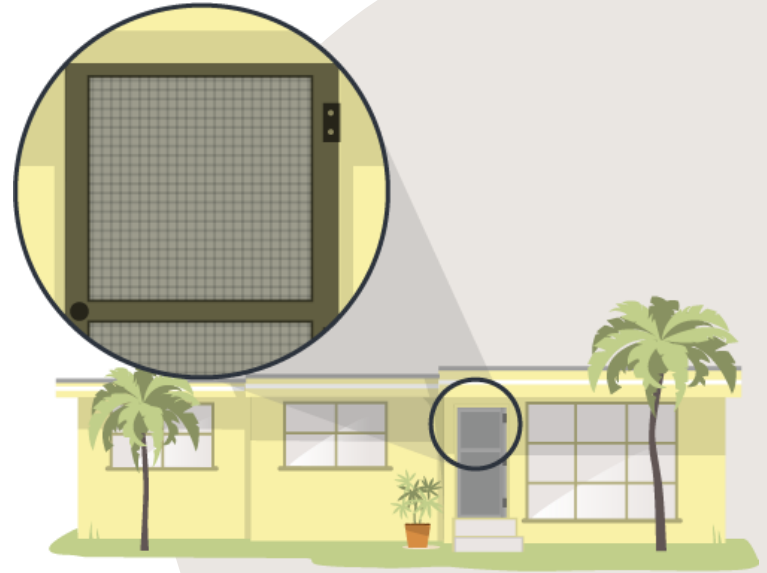
Control mosquitoes outside

- Here's what you can do to help control mosquitoes outside your home
 - » Once a week, empty and scrub, turn over, cover, or throw out items that hold water.
 - » Tightly cover water storage containers.
 - » Use larvicides to kill larvae in containers of water that cannot be emptied and will not be used for drinking.
 - » Use an outdoor insect spray made to kill mosquitoes in areas where they rest.
 - » If you have a septic tank, repair cracks or gaps.



Control mosquitoes inside

- Here's what you can do to help control mosquitoes inside your home:
 - » Use window and door screens.
 - » Use air conditioning when possible.
 - » Once a week, empty, scrub, turn over, or throw out items that hold water.
 - » If you have mosquitoes inside your home, use an indoor insect fogger or indoor insect spray.
 - When using insecticides, always follow label directions.



Wear insect repellent

- Use Environmental Protection Agency (EPA)-registered insect repellents.
 - » Use a repellent with one of the following active ingredients: DEET, picaridin, IR3535, or oil of lemon eucalyptus, para-menthane-diol, or 2-undecanone.
- Always follow the product label instructions.
- Do not spray repellent on the skin under clothing.
- If also using sunscreen, apply sunscreen before applying insect repellent.



Create a barrier between you and mosquitoes

- Cover up exposed skin
 - » Wear long-sleeved shirts and long pants.
- Treat clothing and gear
 - » Use permethrin* to treat clothing and gear or buy pre-treated items.
 - » See product information to learn how long the protection will last.
 - » Do not use permethrin products directly on skin.



* Permethrin is not effective in Puerto Rico.

Protect your family

- For babies and children
 - » Dress your child in clothing that covers arms and legs.
 - » For children older than 2 months, use insect repellent on exposed skin.
 - » Cover crib, stroller, and baby carrier with mosquito netting.



Protect your family

- Applying insect repellent on children
 - » Do not apply repellent onto hands, eyes, mouth, and cut or irritated skin.
 - » Adults: Spray onto your hands and then apply to a child's face.
 - » Do not use insect repellent on babies younger than 2 months old.
 - » Do not use products containing oil of lemon eucalyptus or para-menthane-diol on children younger than 3 years old.



PREVENTION

Preventing sexual transmission

About sexual transmission

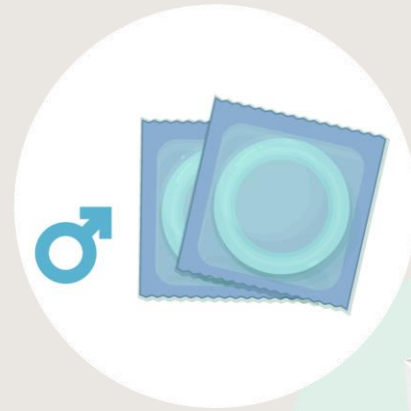
- Zika can be passed through sex from a person who has Zika to his or her sex partners.
 - » Sex includes vaginal, anal, and oral sex and the sharing of sex toys.
 - » Zika can be passed through sex before symptoms start, during, and after symptoms end.
 - » It can be passed even if the infected person does not have symptoms at the time or never develops symptoms.
- Zika virus can stay in semen longer than in vaginal fluids, urine, and blood.



Protect your partner

- Not having sex eliminates the risk of getting Zika from sex.
- Condoms can reduce the chance of getting Zika from sex.
 - » Includes male and female condoms.
 - » Condoms should be used from start to finish, every time during vaginal, anal, and oral sex and the sharing of sex toys.

<http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6529e2.pdf>



Protect your partner

- People with a partner who traveled to an area with risk of Zika can use condoms or not have sex
 - » If the traveler is female: For at least 8 weeks after return, or after start of symptoms or diagnosis
 - » If the traveler is male: For at least 6 months after return, or after start of symptoms or diagnosis
- People living in an area with risk of Zika can use condoms or not have sex.



During pregnancy

- Pregnant couples in which one or both partners live in or traveled to an area with risk of Zika should:
 - » Use condoms from start to finish every time they have sex (oral, vaginal, or anal) or not have sex during the pregnancy.
 - » Not share sex toys during the pregnancy.



If you're thinking about having a baby

Exposure from travel to or sex without a condom with someone who lives in or traveled to an area **with a CDC Zika travel notice**

Women

Wait at least 8 weeks after symptoms start or last possible exposure before trying to get pregnant.

Men

Wait at least 6 months after symptoms start or last possible exposure before trying to conceive with your partner.



If you're thinking about having a baby

Exposure from travel to or sex without a condom with someone who lives in or traveled to an area with risk of Zika but **without a CDC Zika travel notice**

Women

If no symptoms, talk with a healthcare provider about plans for pregnancy.

Wait at least 8 weeks after symptoms start before trying to get pregnant.

Men

If no symptoms, talk with a healthcare provider about plans for pregnancy.

Wait at least 6 months after symptoms start before trying to get pregnant.



If you're thinking about having a baby

People living in or frequently traveling to any area with risk of Zika

Women

If no symptoms, talk with a healthcare provider about plans for pregnancy.

Wait at least 8 weeks after symptoms start before trying to get pregnant.

Men

If no symptoms, talk with a healthcare provider about plans for pregnancy.

Wait at least 8 weeks after symptoms start before trying to get pregnant.



PREVENTION

Traveling

Travel guidance for pregnant women

- If you are pregnant, do not travel to areas with risk of Zika.
- If you must travel, talk to your doctor or other healthcare provider and strictly follow steps to prevent mosquito bites during the trip.



Protect yourself while traveling

- If you travel to an area with risk of Zika
 - » Strictly follow steps to prevent mosquito bites.
 - » Use condoms or do not have sex during the trip.



Protect yourself while traveling

- Stay in places with air conditioning and with window and door screens.
- Use a bed net if air conditioned or screened rooms are not available or if sleeping outdoors.



Protect yourself and others after travel

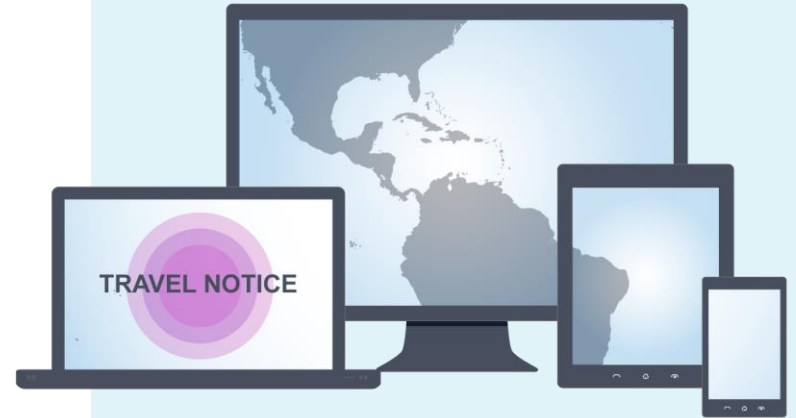
- Even if they do not feel sick, travelers returning from an area with risk of Zika should take steps to prevent mosquito bites for 3 weeks so they do not spread Zika to uninfected mosquitoes.



Do your homework before traveling

See the latest travel notices at:

wwwnc.cdc.gov/travel/page/zika-travel-information



WHAT CDC IS DOING

What is CDC doing?

- Activated Emergency Operations Center (EOC) to level 1
- Alerting healthcare providers and the public about Zika
- Posting travel guidance
- Monitoring infections among pregnant women to identify the long-term consequences of congenital Zika infection.
- Working with clinical experts and organizations to update guidance
- Researching factors that might affect birth defects in fetuses and babies, including the timing of Zika infection during pregnancy.
- Improving laboratory testing for Zika and providing state, tribal, local, and territorial health laboratories with diagnostic tests.



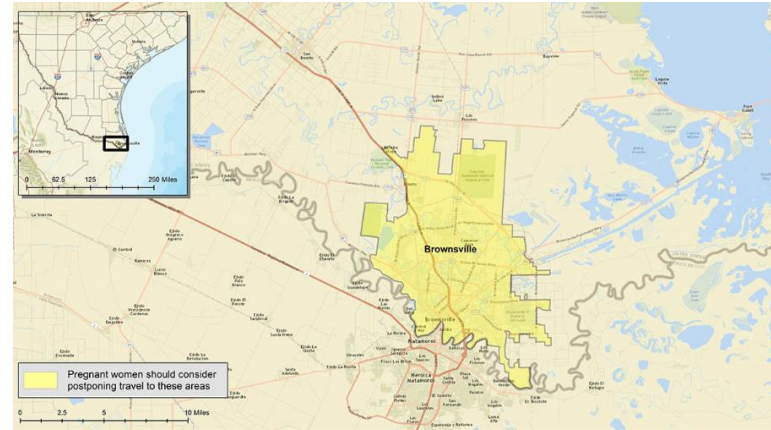
CDC is working with partners to

- Monitor and report cases of Zika.
- Conduct studies to learn more about the potential link between Zika and Guillain-Barré syndrome.
- Create action plans for state and local health officials to improve Zika preparedness.
- Publish and disseminate guidelines to inform testing and treatment of people with suspected or confirmed Zika.
- Working with partners to better understand the risk and spectrum of birth defects from Zika infection during pregnancy and risks for sexual transmission.

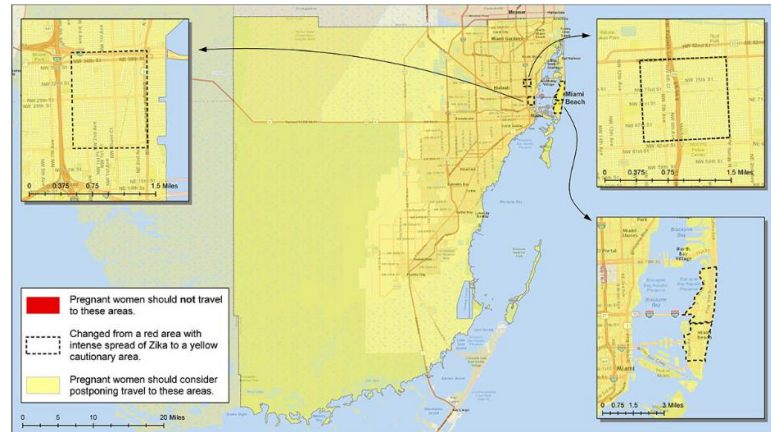


Zika in the United States

- Local mosquito-borne spread of Zika virus was identified in Miami-Dade County, Florida, and Brownsville, Texas.
- Pregnant women should consider postponing travel to all parts of these areas.



Brownsville, Texas



Miami-Dade County, Florida

CDC'S Response to Zika



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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