



# ZIKA 101

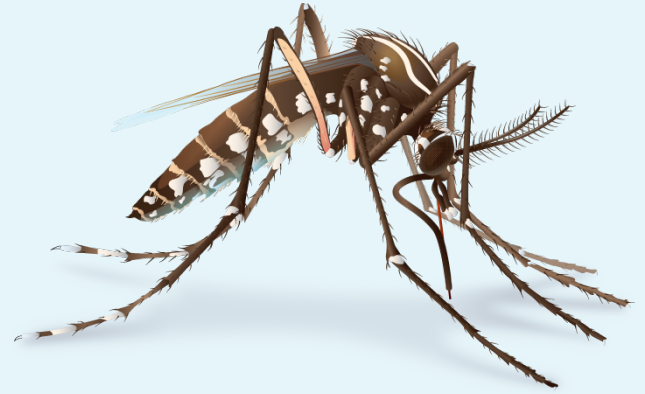
Updated September 8, 2016



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

# What is Zika virus disease (Zika)?

- Disease spread primarily through the bite of an infected *Aedes aegypti* or *Ae. albopictus* mosquito.
- Many people infected with Zika virus won't have symptoms or will only have mild symptoms.
- However, Zika can cause birth defects and other problems such as stillbirth and miscarriage.



# Where has Zika virus been found?

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



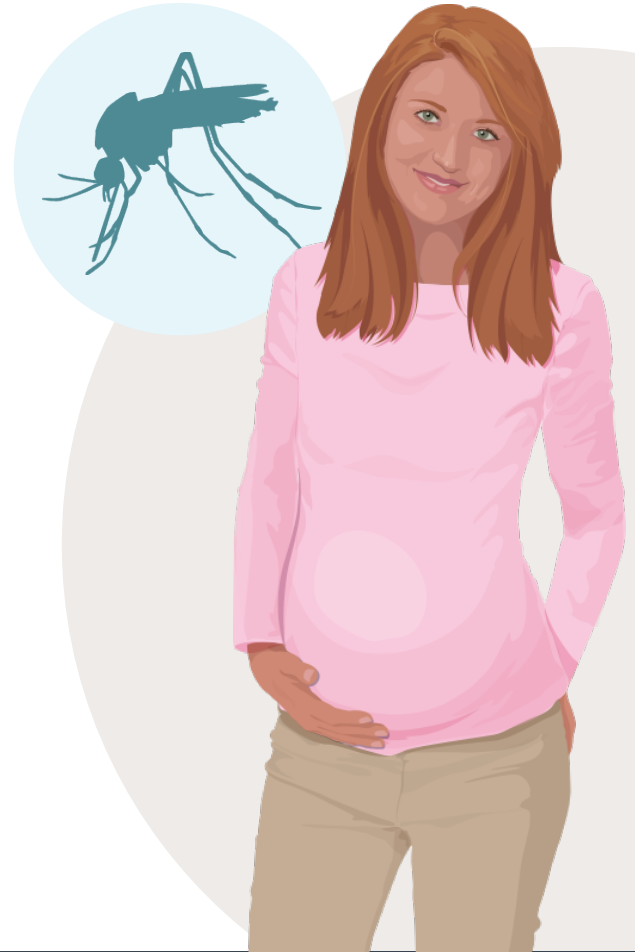
# Zika and the United States

- Local transmission of Zika has been reported in the continental 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.
- For the most recent case counts, visit [CDC's Cases in the United States webpage](#).



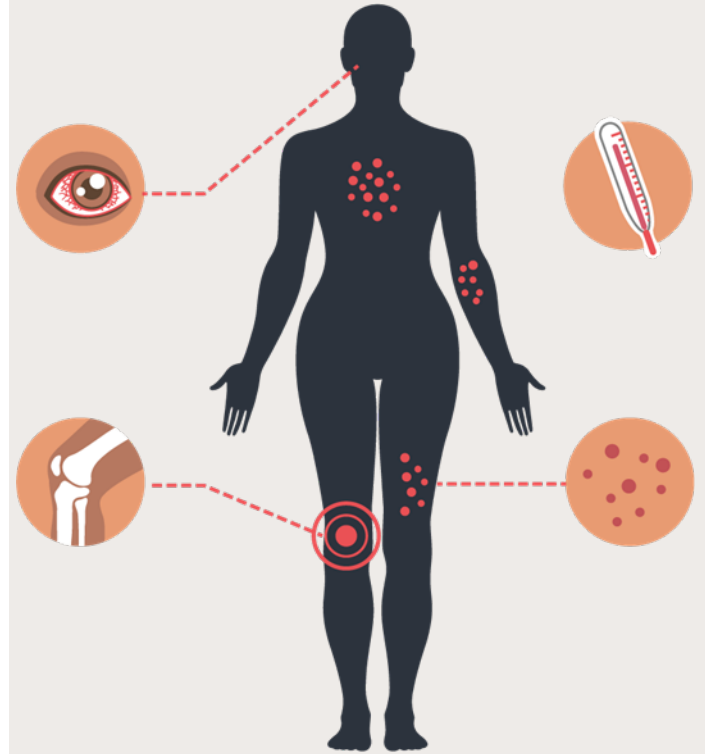
# How is Zika transmitted?

- Zika can be spread through
  - » Mosquito bites
  - » From a pregnant woman to her fetus
  - » Sex with an infected person
  - » Probable: blood transfusion, organ and tissue transplant, fertility treatment, and breastfeeding



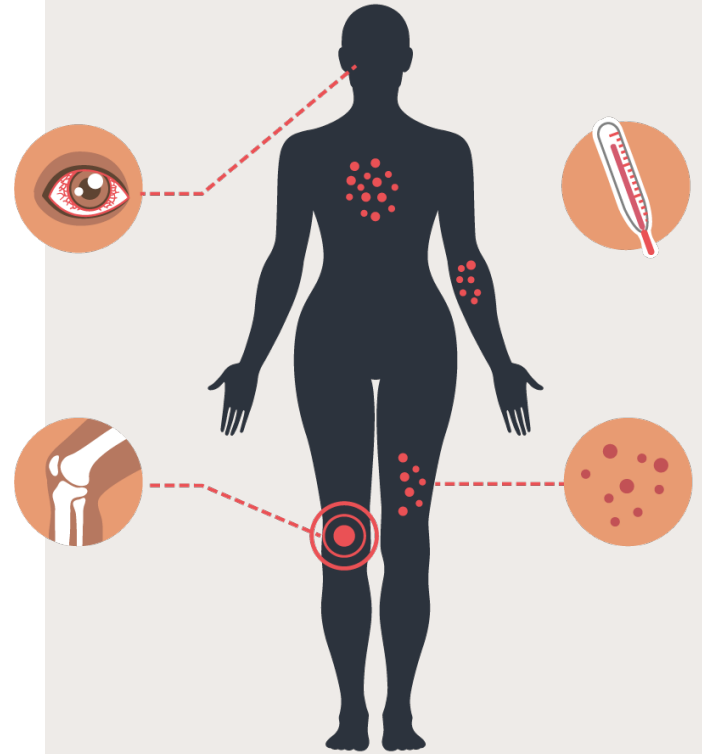
# What are the symptoms?

- The most common symptoms of Zika are
  - » Fever
  - » Rash
  - » Joint pain
  - » Conjunctivitis (red eyes)



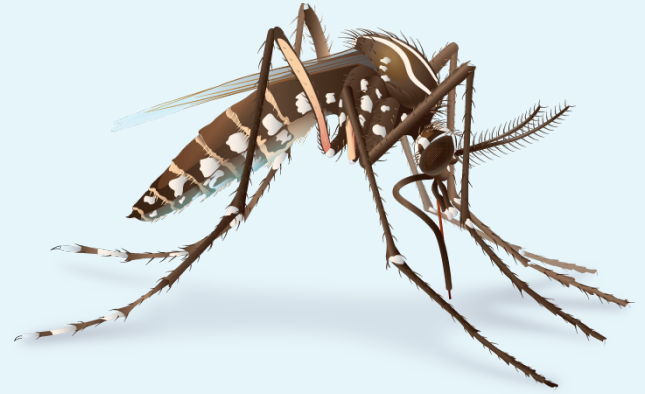
# What are the symptoms?

- Other symptoms include
  - » Muscle pain
  - » Headache



# How does Zika virus affect people?

- Anyone who lives in or travels to an area with Zika and has not already been infected with Zika virus can get it.
- Many people with Zika will not have symptoms or will only have mild symptoms.
- Symptoms last several days to a week.
- Severe disease requiring hospitalization is uncommon.





# How does Zika affect pregnancies?

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



# How does Zika affect pregnancies?

- Zika infection in pregnancy can cause microcephaly and other severe fetal brain defects.
  - » Microcephaly: birth defect in which a baby's head is smaller than expected when compared to babies of the same sex and age.
  - » No evidence that previous infection will affect future pregnancies.



# How does Zika affect fetuses and infants?

- Other problems have been detected in fetuses and infants infected with Zika virus before birth.
  - » Miscarriage, stillbirth, absent or poorly developed brain structures, eye defects, hearing deficits, and impaired growth
- No reports of infants getting Zika through breastfeeding.



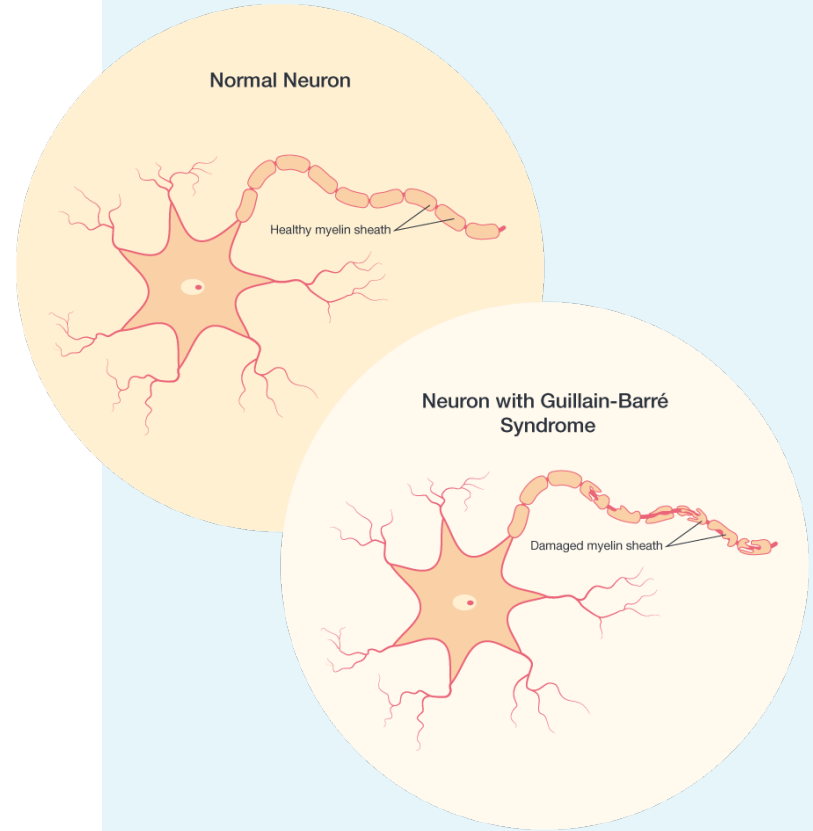
# Zika pregnancy registry

- 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.



# Does Zika cause Guillain-Barré syndrome (GBS)?

- Research suggests that GBS is strongly associated with Zika; however, only a small proportion of people with recent Zika virus infection get GBS. CDC is continuing to investigate the link between GBS and Zika to learn more.
- 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.



# How is Zika diagnosed?

- Diagnosis of Zika is based on a person's recent travel history, symptoms, and test results.
- A blood or urine test can confirm a Zika infection.



# How is Zika diagnosed?

- Symptoms of Zika are similar to other illnesses, like dengue and chikungunya, that spread through mosquito bites.



# How is Zika diagnosed?

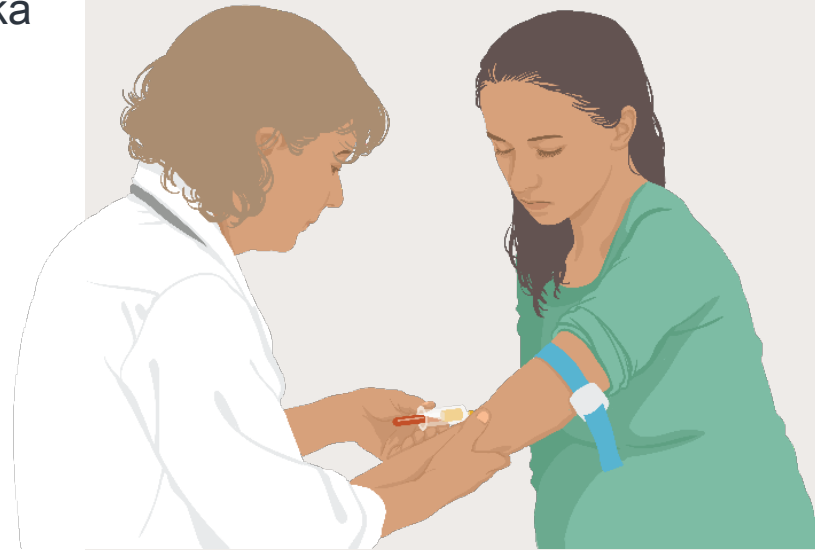
- A doctor or other healthcare provider may order tests to look for several types of infections.





# How is Zika diagnosed?

- All pregnant women should be assessed for Zika exposure at each prenatal care visit. They should be asked if they
  - » Traveled to or live in an area with active Zika transmission.
  - » Had sex without a condom with a partner who lives in or traveled to an area with active Zika transmission.



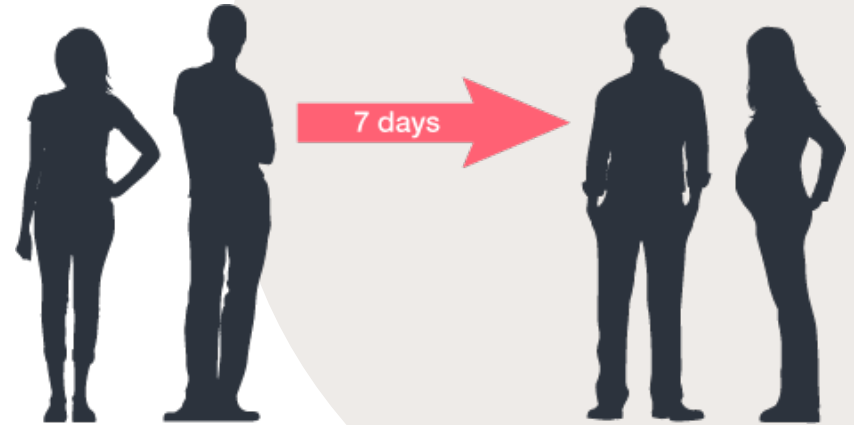
# How is Zika treated?

- 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.



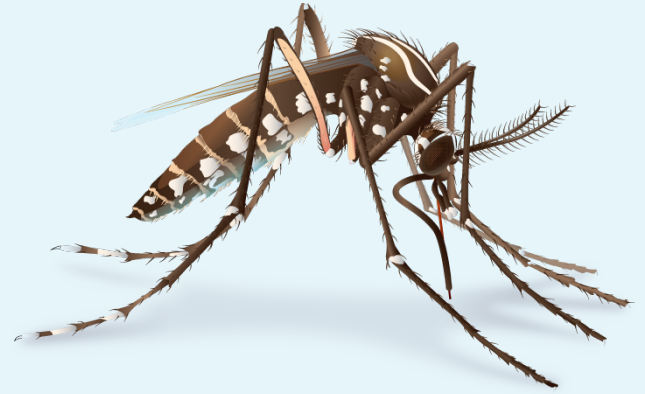
# What to do after getting Zika

- 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.



# **PREVENTING MOSQUITO BITES**

Zika is primarily spread through mosquito bites. Protect yourself and others.



# Keep mosquitoes outside

- Here's what you can do to help control mosquitoes outside your home:
  - » Use an outdoor insect spray made to kill mosquitoes in areas where they rest.
  - » If you have a septic tank, repair cracks or gaps.



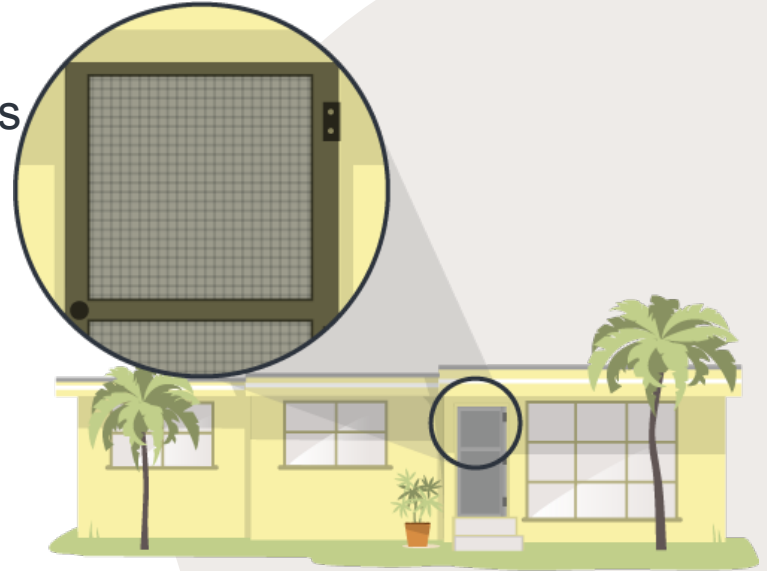
# Keep mosquitoes outside

- 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 young mosquitoes in large containers of water that will not be used for drinking.



# Keep mosquitoes outside

- Here's what you can do to keep mosquitoes outside of 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.
  - » Use an indoor insect fogger or indoor insect spray.
    - When using insecticides, always follow label directions.





# Keep mosquitoes outside

- When 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.



## STEP 2

# Create a barrier between you and mosquitoes

- Cover up!
  - » Wear long-sleeved shirts and long pants



## STEP 2

# Create a barrier between you and mosquitoes

- 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.



## Wear insect repellent

- Use Environmental Protection Agency (EPA)-registered insect repellents.
  - » Use a repellent with DEET, picaridin, IR3535, or oil of lemon eucalyptus or para-menthane-diol



## STEP 3

# Wear insect repellent

- 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.



# Protect your family

- For babies and children
  - » Dress your child in clothing that covers arms and legs.
  - » Do not use insect repellents 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.



## Protect your family

- For babies and children
  - » Cover crib, stroller, and baby carrier with mosquito netting.



## Protect your family

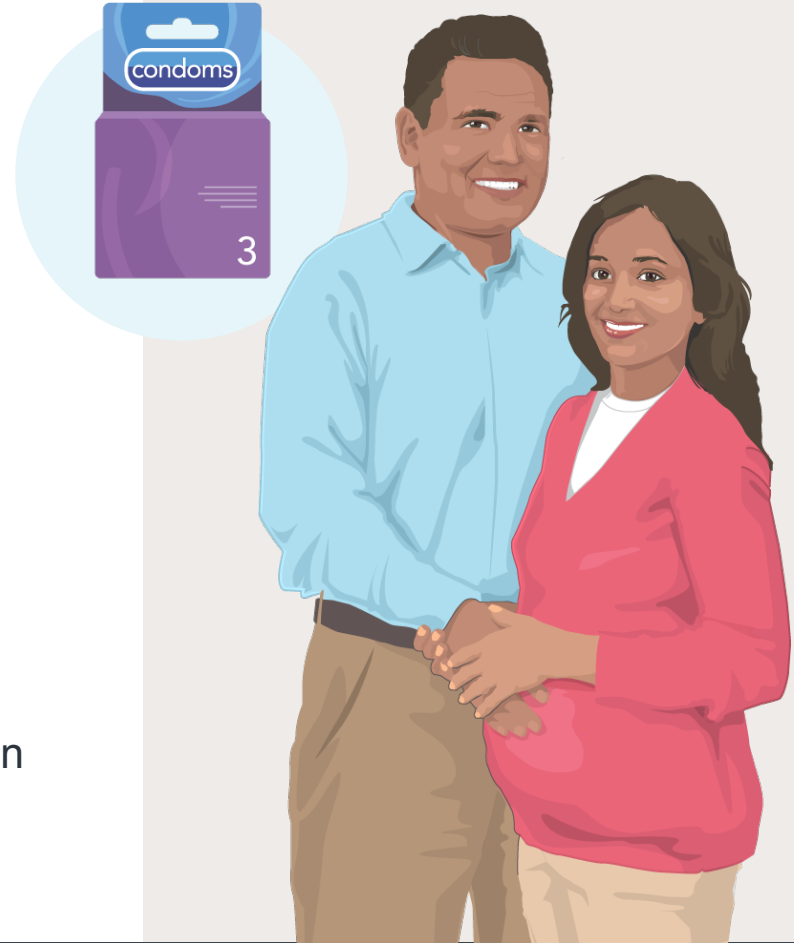
- For babies and children
  - » Do not apply onto hands, eyes, mouth, and cut or irritated skin.
  - » Adults: Spray onto your hands and then apply to a child's face.
  - » Remember: Do not use insect repellent on babies younger than 2 months old.





## Protect your partner

- 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.
- Zika virus can remain in semen longer than in other body fluids, including vaginal fluids, urine, and blood.



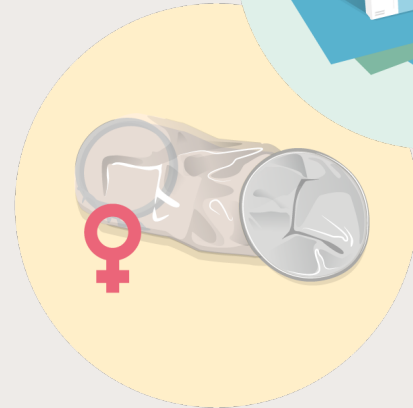
## Protect your partner

- We do not know
  - » If sexually-transmitted Zika virus poses a different risk of birth defects than mosquito-borne transmission.
- CDC and other public health partners continue to study Zika virus and how it is spread.



## Protect your partner

- Not having sex eliminates the risk of getting Zika from sex.
- Condoms can reduce the chance of getting Zika from sex if used correctly from start to finish, every time you have vaginal, anal, or oral sex.
  - » Condoms include male and female condoms.



## Protect your partner

- Pregnant couples in which one or both partners have traveled to or live in an area with Zika should use a condom correctly, from start to finish, every time they have sex or should not have sex during the pregnancy.
- Not sharing sex toys can also reduce the risk of spreading Zika to sex partners.



## Protect your partner

- People without a pregnant partner who recently traveled to or lived in an area with Zika
  - » If you've been diagnosed with Zika or have (or had) symptoms, you can use condoms or not have sex for 6 months after symptoms begin.
  - » If you never developed symptoms, you can use condoms or not have sex for 8 weeks after returning from travel, or while there is Zika in the area.



## Do your homework before traveling

- If you are pregnant, do not travel to areas with Zika.
  - » If you must travel, talk to your doctor or other healthcare provider before your trip.
- If you are trying to get pregnant, talk to your doctor or other healthcare provider before you travel.



## Do your homework before traveling

- If you choose to travel:
  - » Strictly follow steps to prevent mosquito bites to protect yourself and your family.
  - » Even if you do not feel sick, travelers from an area with Zika should take steps to prevent mosquito bites for 3 weeks so they do not spread Zika to uninfected mosquitoes.
  - » Use condoms or do not have sex while traveling to areas with Zika.



## Do your homework before traveling

See the latest travel notices at:

[wwwnc.cdc.gov/travel/page/zika-travel-information](http://wwwnc.cdc.gov/travel/page/zika-travel-information)





# What is CDC doing?

- Activated Emergency Operations Center (EOC) to level 1.
- Providing on-the-ground support in areas with Zika.
- Educating healthcare providers and the public about Zika.
- Posting travel guidance.
- Providing laboratories with diagnostic tests.
- Creating and distributing Zika Prevention Kits to affected US territories.
- Conducting a study to evaluate the persistence of Zika virus in semen, vaginal fluids and urine.



# What is CDC doing?

- Working with partners to
  - » Monitor and report cases.
  - » 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.
  - » Publish and disseminate conclusions on the causal association between Zika and microcephaly.



# CDC'S Response to Zika



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



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