CDC Responds to ZIKA

Zika *101*

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 *Aedes* species mosquito infected with Zika virus.
- Most people infected with Zika virus won't even know they have the disease because they won't have symptoms.
- For those who do have symptoms, they are mild and last for several days to a week.

Where has Zika virus been found?

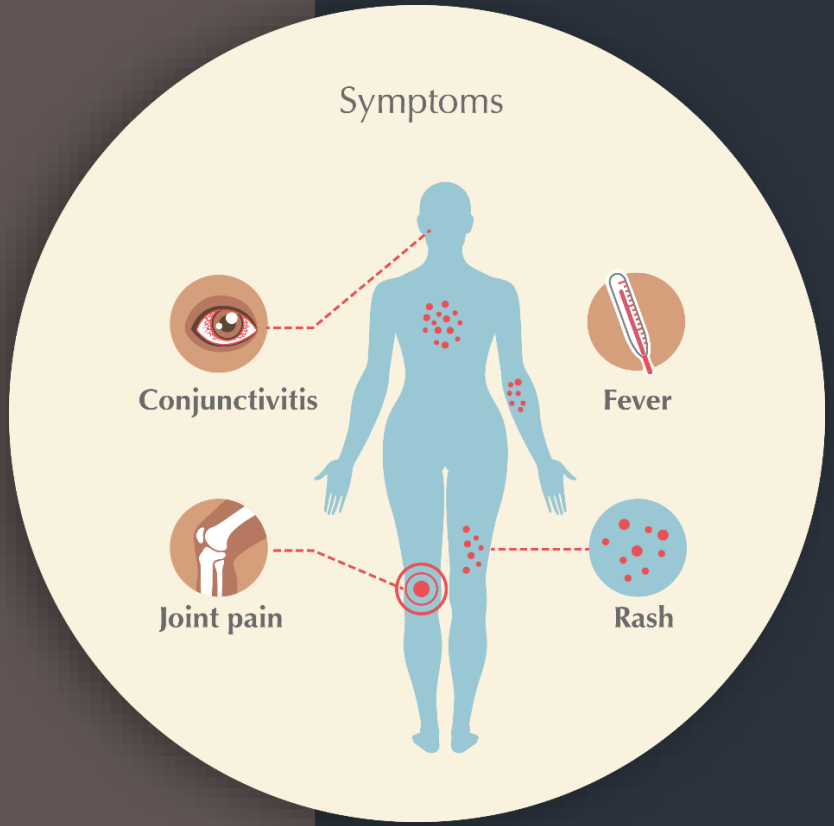
- Before 2015, Zika outbreaks occurred in Africa, Southeast Asia, and the Pacific Islands.
- Currently outbreaks are occurring in many countries and territories.

How is Zika transmitted?

- Zika can be transmitted through:
  - Mosquito bites
  - From a pregnant woman to her fetus
  - Sexual contact
  - Blood transfusion

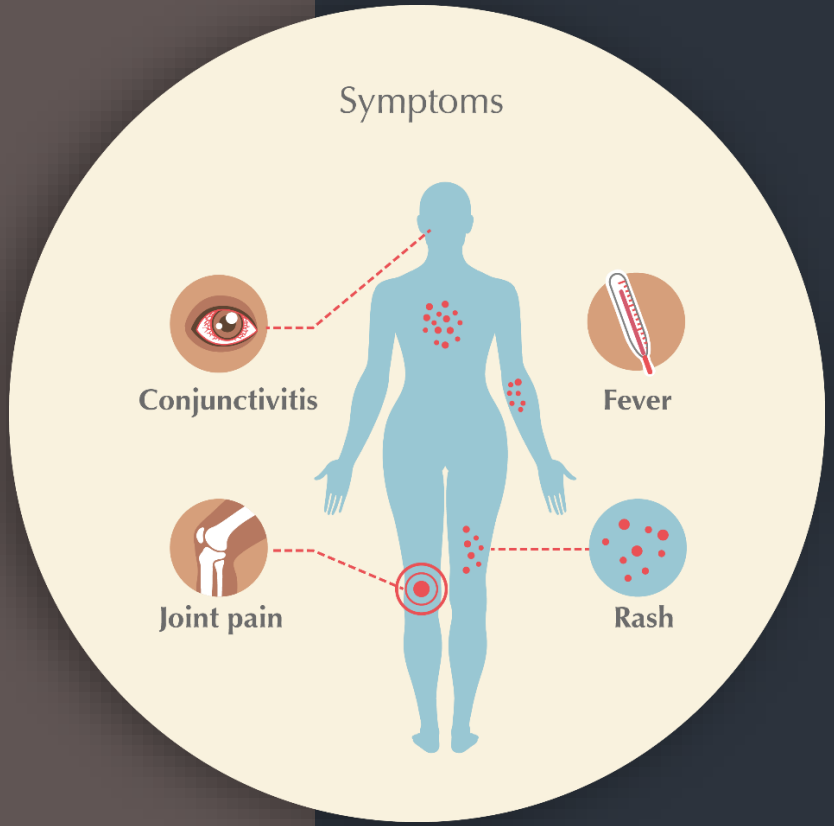
What are the symptoms?

- 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.
- Most people infected with Zika won't even know they have the disease because they won't have symptoms.
- For those who do get sick, Zika is a mild illness.

How does Zika affect pregnant women?

- Zika virus can pass from a pregnant woman to her fetus during pregnancy or around the time of delivery.

How does Zika affect pregnant women?

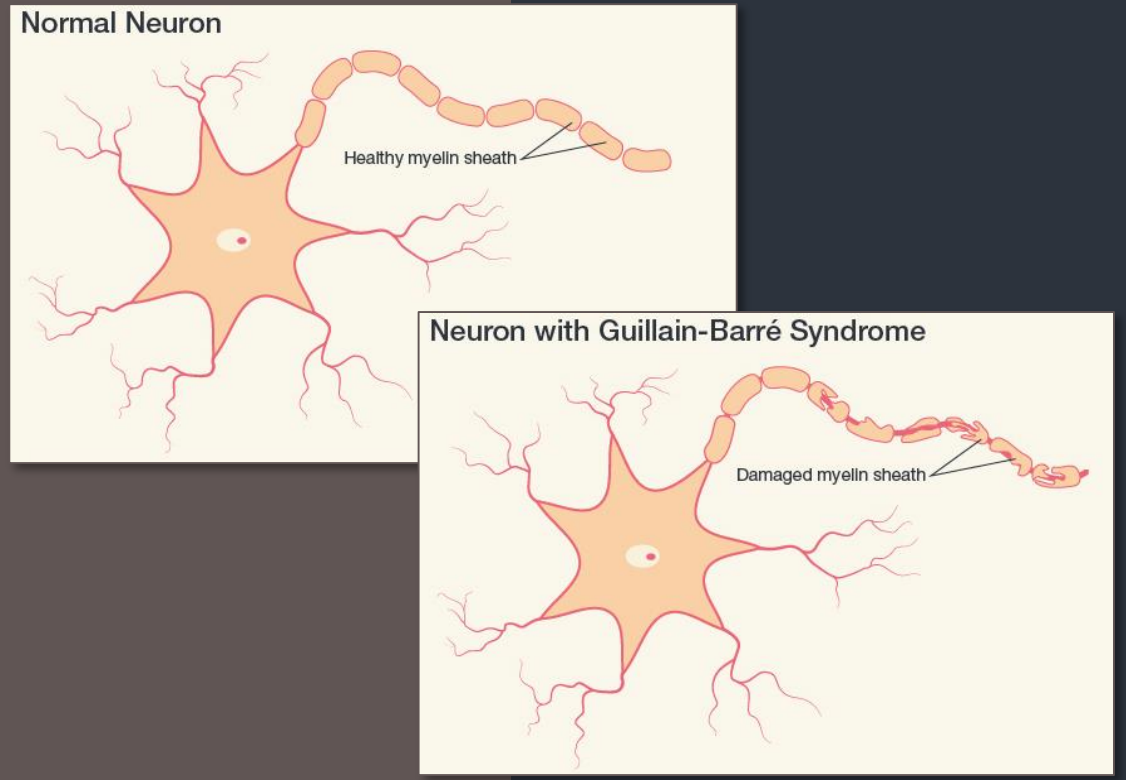
- Zika infection in pregnancy is linked to microcephaly.
  - Microcephaly: birth defect in which a baby's head is smaller than expected when compared to babies of the same sex and age.
  - Previous infection will not affect future pregnancies.

How does Zika affect pregnant women?

- In addition to microcephaly, other problems have been detected in pregnancies among fetuses and infants infected with Zika virus before birth.
- Although there are links, there is still more to learn and researchers are collecting data to better understand the extent of Zika virus' impact on mothers and their children.
- No reports of virus spread through breastfeeding.

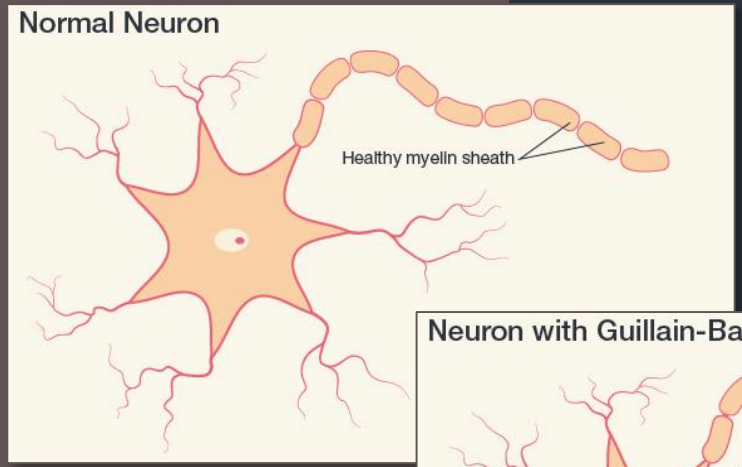
Does Zika cause Guillain-Barré Syndrome (GBS)?

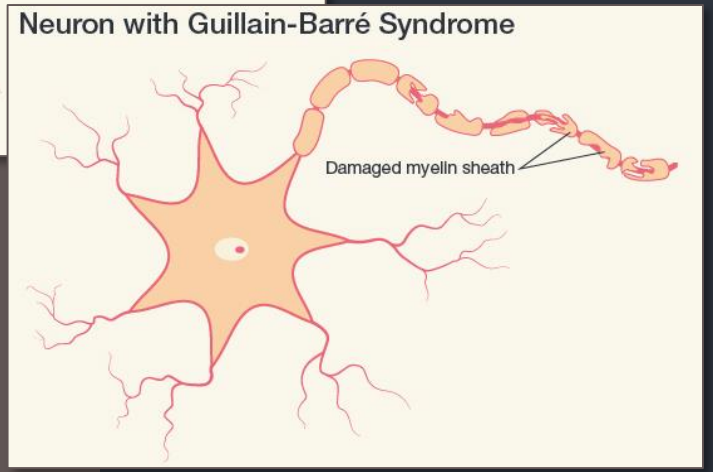
- GBS is very likely triggered by Zika in a small proportion of infections, much as it is after a variety of other infections.
- GBS is an uncommon sickness of the nervous system in which a person's own immune system damages the nerve cells, causing muscle weakness, and sometimes, paralysis.



Does Zika cause Guillain-Barré Syndrome (GBS)?

- The Brazil Ministry of Health (MOH) is reporting an increased number of people affected with GBS.
- CDC is investigating the link between Zika and GBS.





How is Zika diagnosed?

- Diagnosis of Zika is based on a person's recent travel history, symptoms, and results of blood tests.
- A blood test is the only way to confirm a Zika infection.

How is Zika diagnosed?

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

How is Zika diagnosed?

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

How is Zika treated?

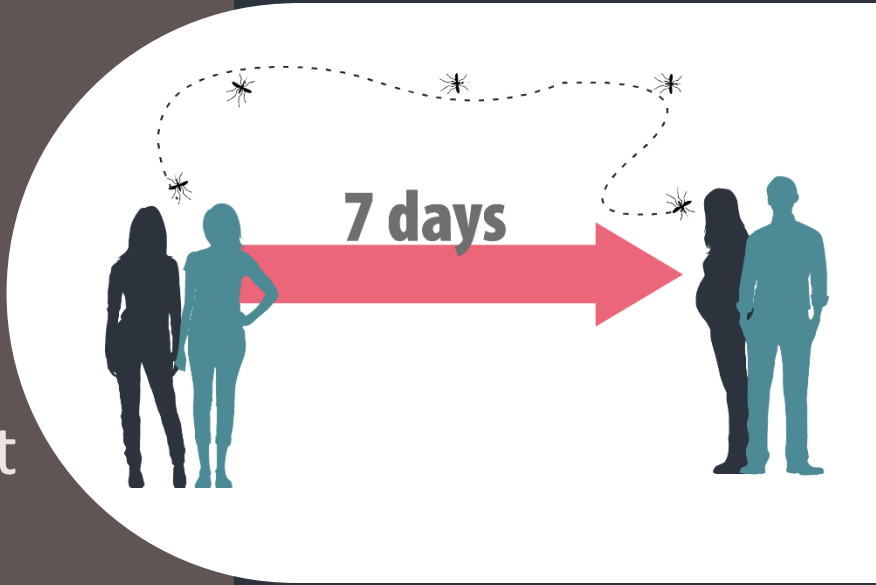
- There is no specific medicine or vaccine for Zika virus.

How is Zika treated?

- Treat symptoms
  - Rest
  - Drink fluids to prevent dehydration
  - Take acetaminophen (Tylenol®) to reduce fever and pain

How is Zika treated?

- Protect yourself from mosquito bites. During the first week of illness, Zika virus can be found in blood for about a week. If a mosquito bites the person, it becomes infected and can pass the infection to others.



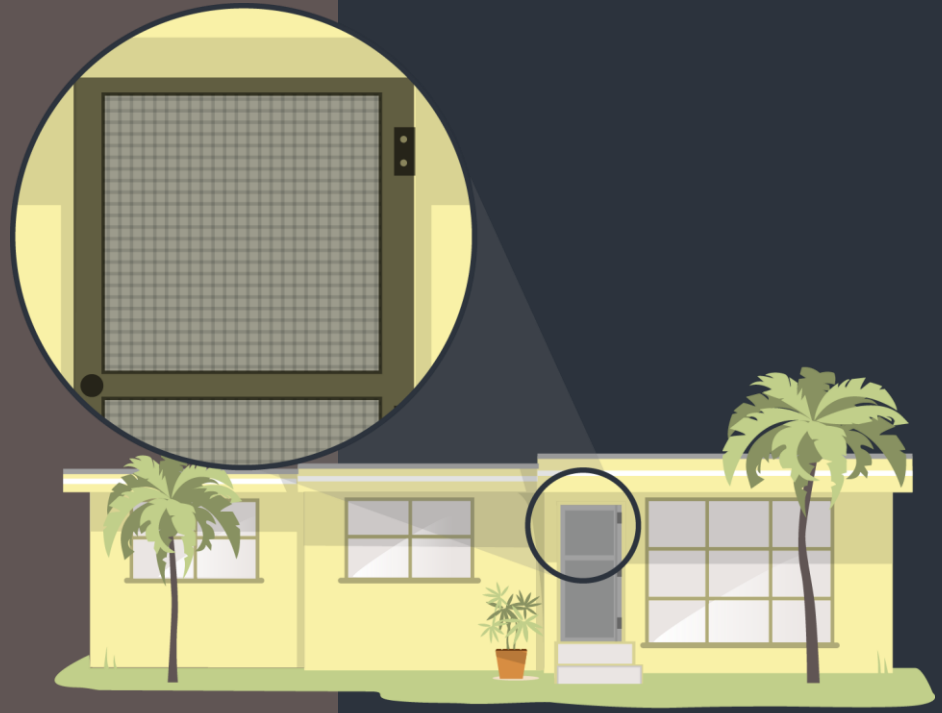
Preventing Mosquito Bites

Zika is primarily transmitted through mosquito bites.

Protect yourself.

STEP 1 Keep mosquitoes outside

- Keep mosquitoes out of your home or hotel.
  - Stay in places with air conditioning and with window/door screens.



STEP 1 Keep mosquitoes outside

- Keep mosquitoes out of your home or hotel.
  - Once a week, empty and scrub, turn over, cover, or throw out items that hold water, such as tires, buckets, planters, toys, pools, birdbaths, flowerpots, or trash containers. Check inside and outside your home.

STEP 1 Keep mosquitoes outside

- Keep mosquitoes out of your home or hotel.
  - When traveling, 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 permethrin-treated clothing and gear. Read product information to find out how long the protection will last.

STEP 2 Create a barrier between you and mosquitoes

- Treat clothing and gear
  - If treating items yourself, always follow the product instructions.

STEP 2 Create a barrier between you and mosquitoes

- Treat clothing and gear
  - Do not use permethrin products directly on skin.

STEP 3 Wear insect repellent

- Use Environmental Protection Agency (EPA)-registered insect repellents.
  - Use a repellent with DEET, picaridin, IR535, or oil of lemon eucalyptus or para-menthane-diol

STEP 3 Wear insect repellent

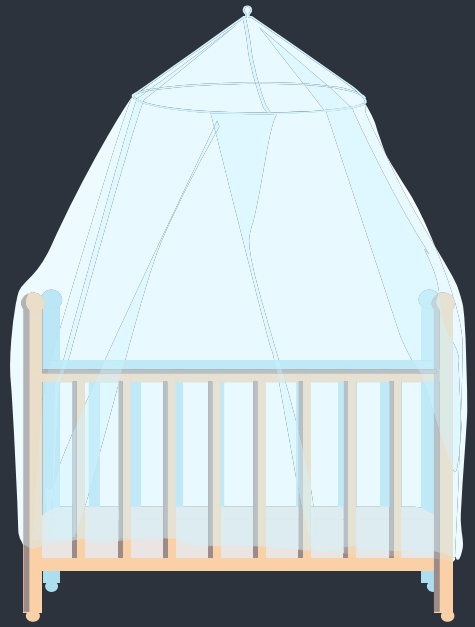
- Always follow the product label instructions.
- Do not spray repellent on the skin under clothing.
- If also using sunscreen, apply sunscreen before applying insect repellent.

STEP 4 Protect your family

- For babies and children
  - 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.

STEP 4 Protect your family

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



STEP 4 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.

STEP 5 Protect your partner

- Zika virus can be spread by a man infected with Zika to his partners.
- In known cases of sexual transmission, the men had Zika symptoms. From these cases, we know the virus can be spread when the man has symptoms, before symptoms start, and after symptoms end.
- The virus can stay in semen longer than in blood.

STEP 5 Protect your partner

- We do not know how long the virus can stay in the semen of men who have had Zika, and how long the virus can be spread through sex.
- We do not know if sexual transmission of Zika virus poses a different risk of birth defects than mosquito-borne transmission.

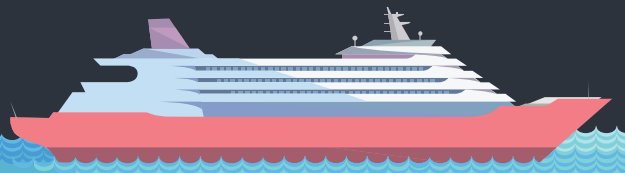
STEP 5 Protect your partner

- Not having sex is the only way to be sure that someone does not get sexually transmitted Zika virus.

- CDC recommends men who live in or traveled to an area with Zika virus should use a condom correctly, from start to finish, for vaginal, anal, and oral (mouth-to-penis) sex, every time you have sex; or not have sex.

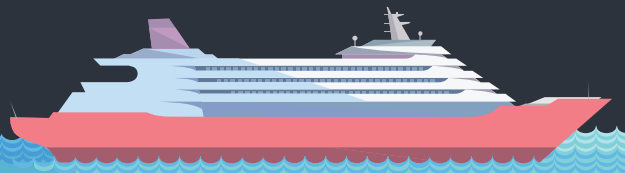
STEP 6 Do your homework before traveling

- If you are pregnant, you should not travel to any area with Zika. If you must travel, talk to your doctor or healthcare provider before your trip.
- If you are trying to get pregnant, talk to your doctor or healthcare provider before you travel.



STEP 6 Do your homework before traveling

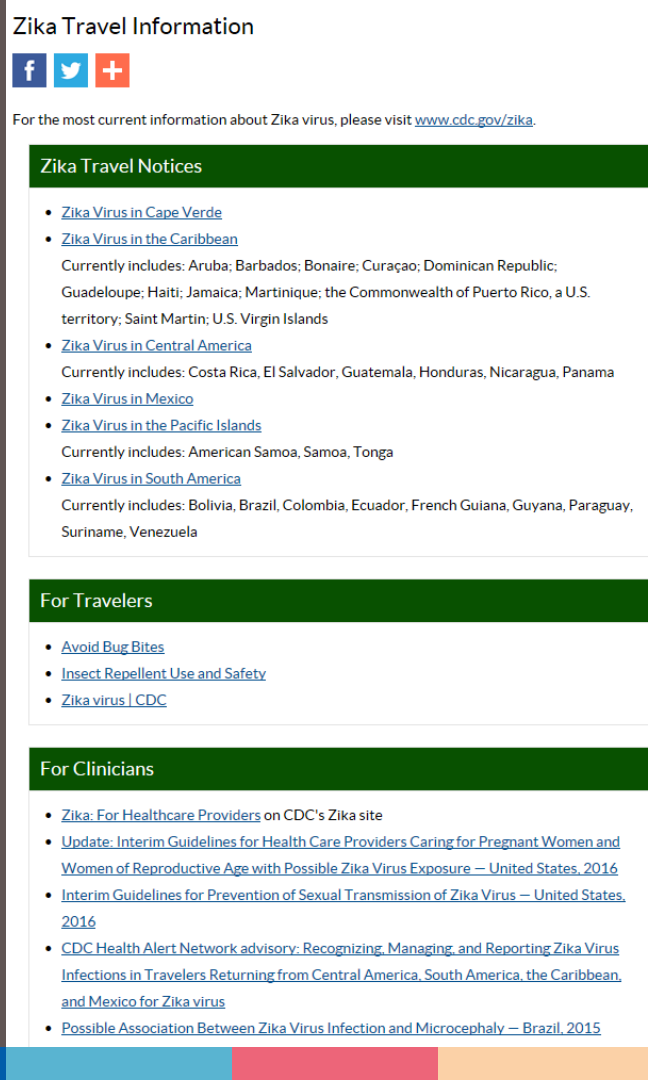
- If you choose to travel:
  - Strictly follow steps to prevent mosquito bites to protect yourself and your family.
  - Even if you do not feel sick, travelers returning to the United States from an area with Zika should take steps to prevent mosquito bites for 3 weeks so they do not spread Zika to uninfected mosquitos.



STEP 6 Do your homework before traveling

See the latest travel notices at:

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



Zika Travel Information

For the most current information about Zika virus, please visit www.cdc.gov/zika.

Zika Travel Notices

- Zika Virus in Cape Verde
- Zika Virus in the Caribbean
  Currently includes: Aruba; Barbados; Bonaire; Curaçao; Dominican Republic; Guadeloupe; Haiti; Jamaica; Martinique; the Commonwealth of Puerto Rico, a U.S. territory; Saint Martin; U.S. Virgin Islands
- Zika Virus in Central America
  Currently includes: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama
- Zika Virus in Mexico
- Zika Virus in the Pacific Islands
  Currently includes: American Samoa, Samoa, Tonga
- Zika Virus in South America
  Currently includes: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Suriname, Venezuela

For Travelers

- Avoid Bug Bites
- Insect Repellent Use and Safety
- Zika virus | CDC

For Clinicians

- Zika: For Healthcare Providers on CDC's Zika site
- Update: Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women of Reproductive Age with Possible Zika Virus Exposure — United States, 2016
- Interim Guidelines for Prevention of Sexual Transmission of Zika Virus — United States, 2016
- CDC Health Alert Network advisory: Recognizing, Managing, and Reporting Zika Virus Infections in Travelers Returning from Central America, South America, the Caribbean, and Mexico for Zika virus
- Possible Association Between Zika Virus Infection and Microcephaly — Brazil, 2015

What is CDC doing?

- Working with partners to:
  - Educate healthcare providers and the public about Zika.
  - Post travel notices and other travel-related guidance.
  - Provide state and territorial health laboratories with diagnostic tests.
  - Create and distribute Zika Prevention Kits for affected US territories

What is CDC doing?

- Working with partners to:
  - Monitor and report cases.
  - Support mosquito control programs both in the United States and around the world.
  - Conduct studies to learn more about Zika and microcephaly and Guillain-Barré syndrome.

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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