



ZIKA 101

Updated February 2, 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.

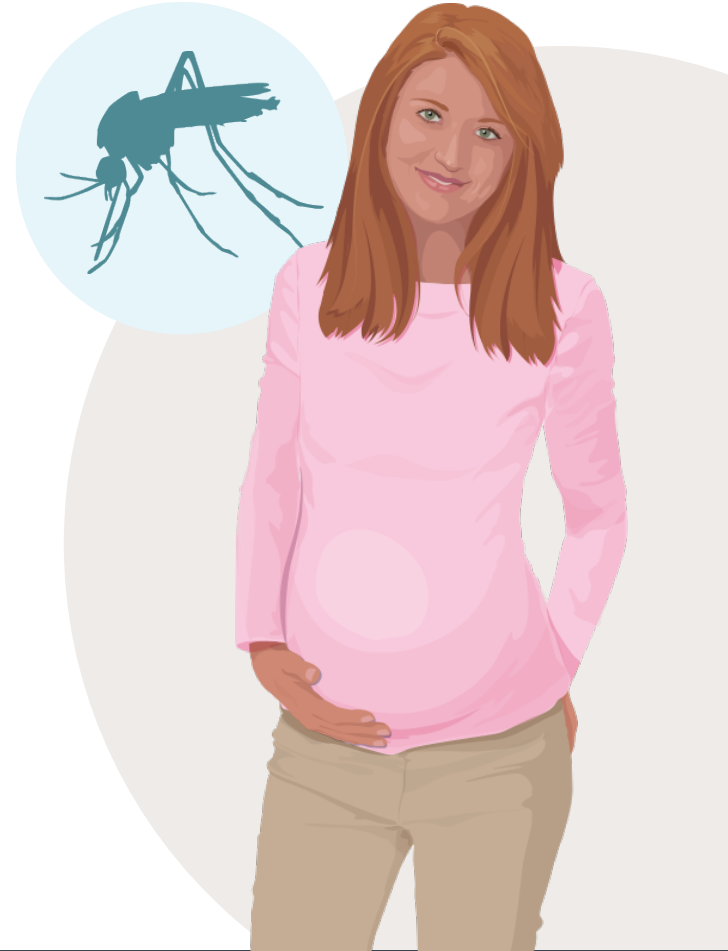


<http://www.cdc.gov/zika/geo/index.html>

SPREAD AND SYMPTOMS

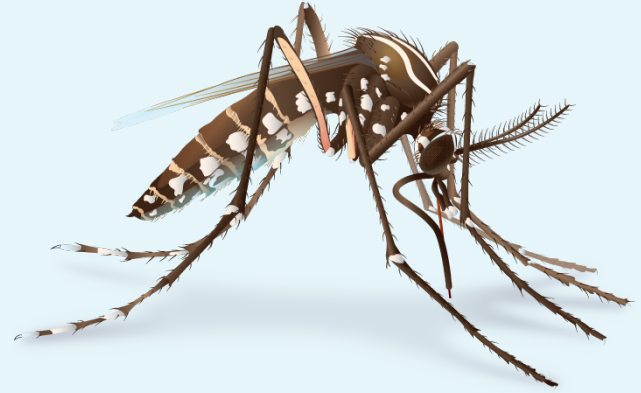
How is Zika spread?

- 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.



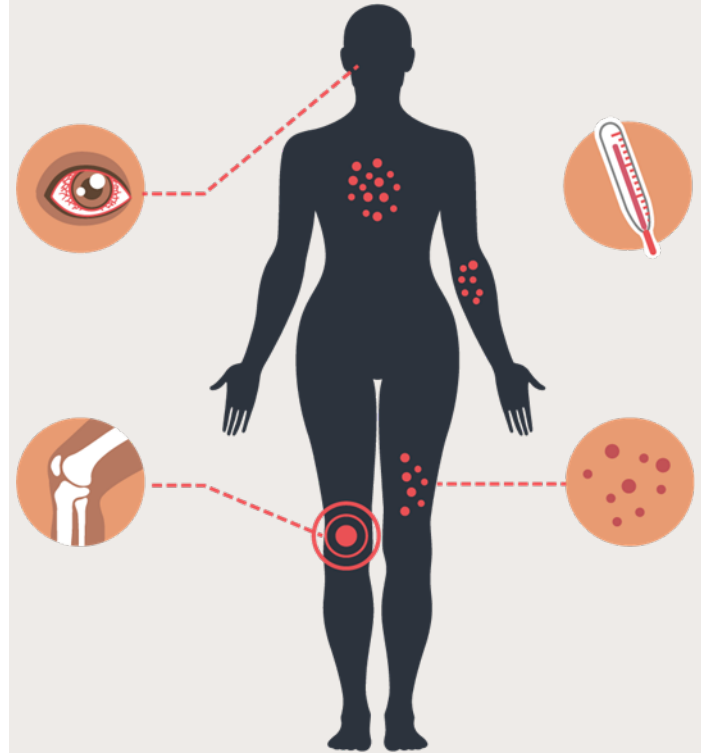
How does Zika affect people?

- 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
 - » Joint pain
 - » Conjunctivitis (red eyes)
- Other symptoms include
 - » Muscle pain
 - » Headache



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 microcephaly and other severe brain defects.
- 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

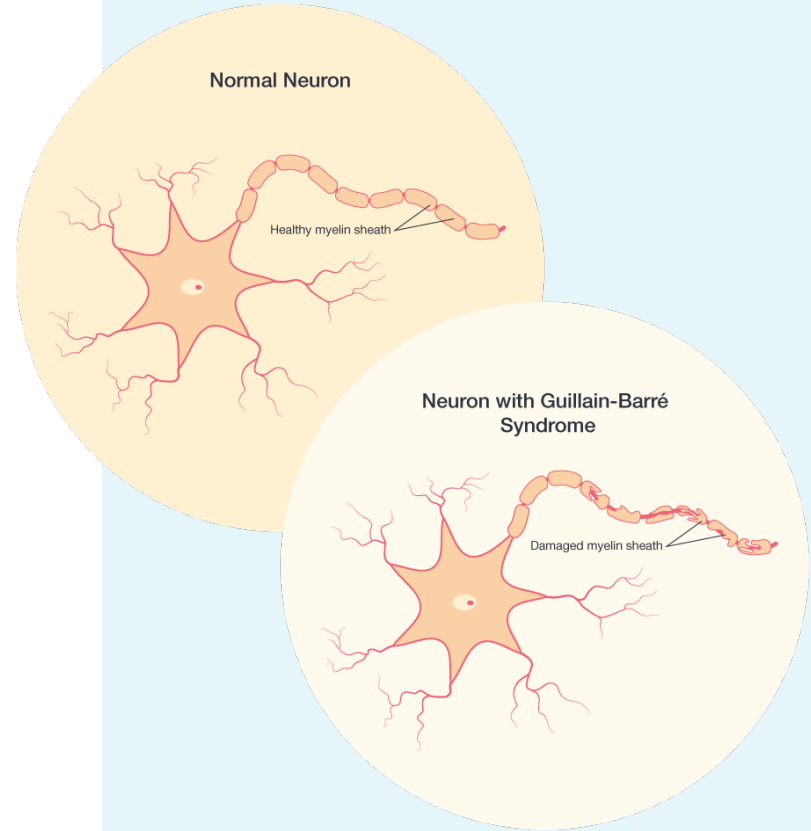
- At each prenatal care visit, all pregnant women should be asked if they
 - » Traveled to or live in an area with Zika.
 - » Had sex without a condom with a partner who lives in or traveled to an area with Zika.



GUILLAIN- BARRÉ SYNDROME

Does Zika cause Guillain-Barré syndrome (GBS)?

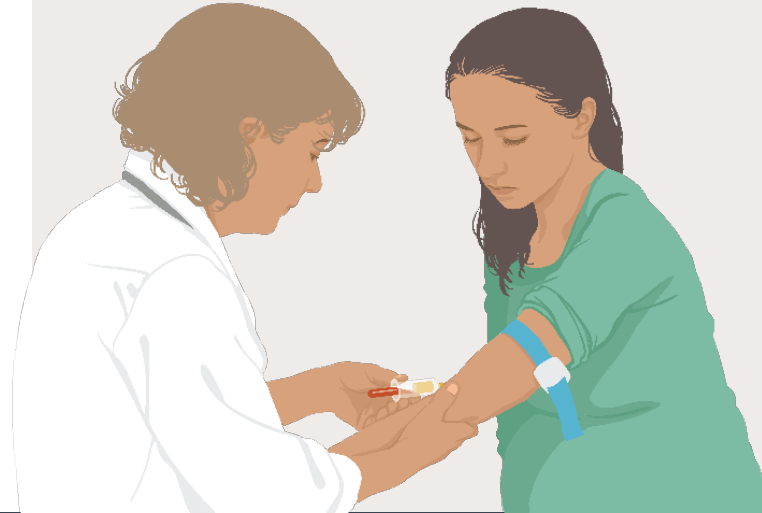
- GBS is an uncommon sickness of the nervous system in which a person's own immune system damages the nerve cells, causing muscle weakness, and sometimes, paralysis.
- GBS is strongly associated with Zika but only a small proportion of people with recent Zika infection get GBS.
- CDC is continuing to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



TESTING

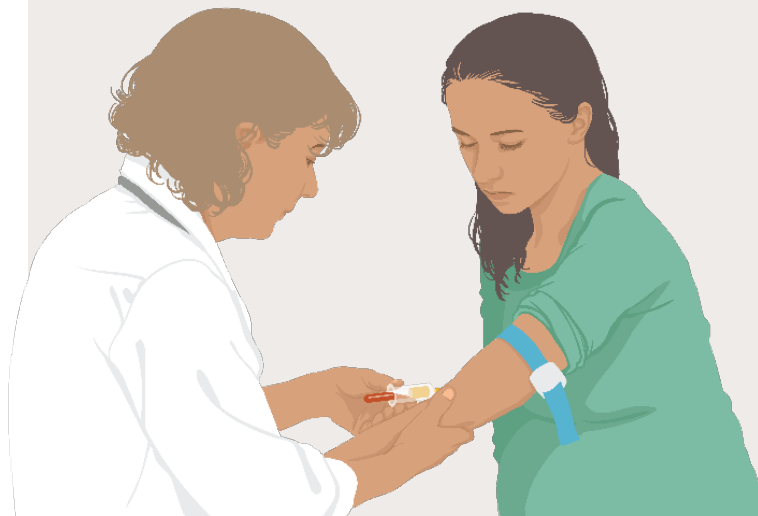
How is Zika diagnosed?

- A doctor or other healthcare provider may order tests to look for similar types of infections.
- A blood or urine test can confirm a Zika infection if specimens are collected early in a person's infection.



Who should be tested for Zika?

- Anyone who has or recently had Zika symptoms
 - » And lives in or recently traveled to an area with Zika, or
 - » Had unprotected sex with a partner who lived in or traveled to an area with Zika
- All pregnant women who
 - » Live in or recently traveled to an area with Zika, or
 - » Had sex without a condom with a partner who lives in or recently traveled to an area with Zika, whether or not they have Zika symptoms.



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

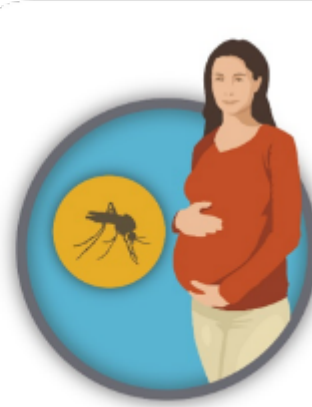
US Zika Pregnancy
Registry



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.



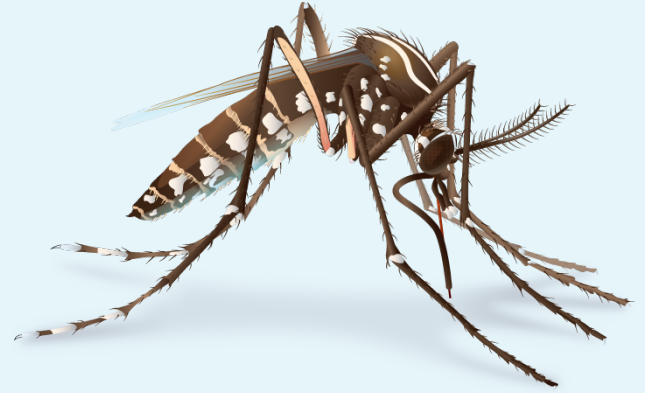
<https://www.cdc.gov/zika/hc-providers/registry.html>

<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 *Aedes albopictus* mosquito. Take steps to protect yourself and others.



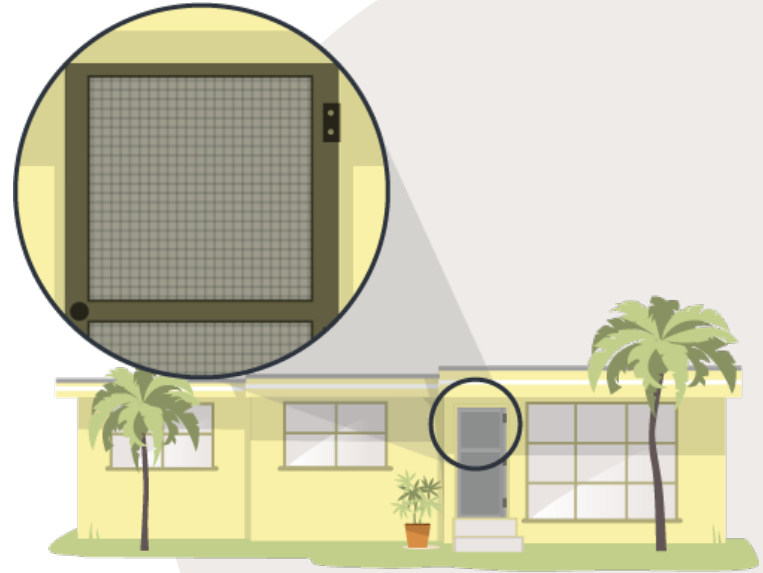
Control mosquitoes outside

- 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.
 - » 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 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 for babies and 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

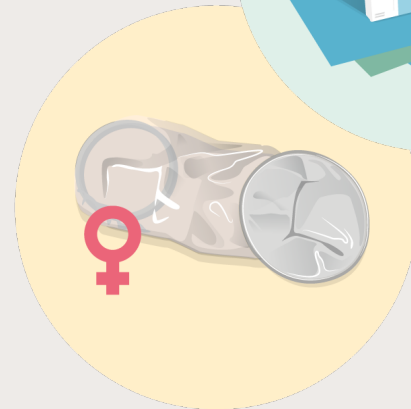
About sexual transmission

- 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.



Protect your partner

- People with a partner who traveled to an area with 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 Zika can use condoms or not have sex for as long as Zika is in the area.



Protect your partner: During pregnancy

- Pregnant couples in which one or both partners live in or traveled to an area with Zika should
 - » Use condoms every time you have sex or do not have sex during the pregnancy.
 - » Do not share sex toys during the pregnancy.



Protect your partner: If you're thinking of having a baby

Possible exposure via recent travel or sex without a condom with a partner infected with Zika

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.



Protect your partner: If you're thinking of having a baby

People
living in or frequently traveling to areas with Zika

	Women	Men
Positive Zika test	Wait at least 8 weeks after symptoms start before trying to get pregnant.	Wait at least 6 months after symptoms start before trying to conceive with your partner.
No testing performed or negative test	Talk with doctor or healthcare provider	Talk with doctor or healthcare provider



PREVENTION

Traveling

Travel guidance for pregnant women

- If you are pregnant, do not travel to areas with Zika.
- Pregnant women should talk with their healthcare provider and consider postponing nonessential travel to countries in CDC's special travel considerations for Southeast Asia.
- If you must travel, talk to your doctor or other healthcare provider before your trip.



Protect yourself while traveling

- If you travel to an area with 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 you don't feel sick, take steps to prevent mosquito bites for 3 weeks after travel so you don't 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
- Providing on-the-ground support in areas with Zika
- Educating healthcare providers and the public about Zika
- Providing travel guidance
- Developing lab tests and providing labs with diagnostic tests
- Conducting a study to evaluate the persistence of Zika virus in blood, semen, vaginal fluids, and urine



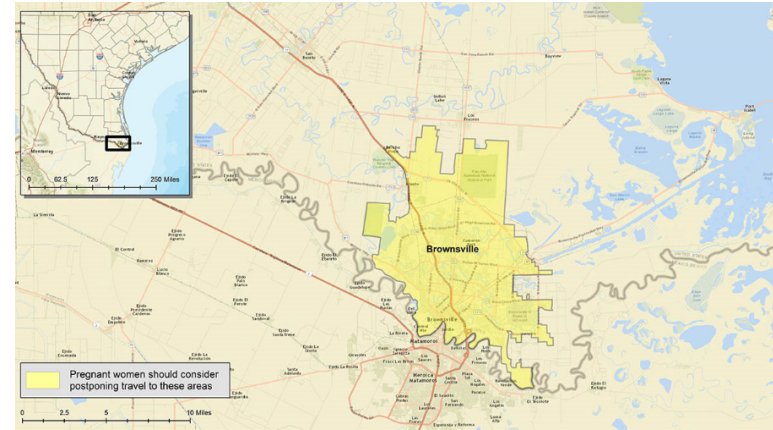
CDC is working with partners to



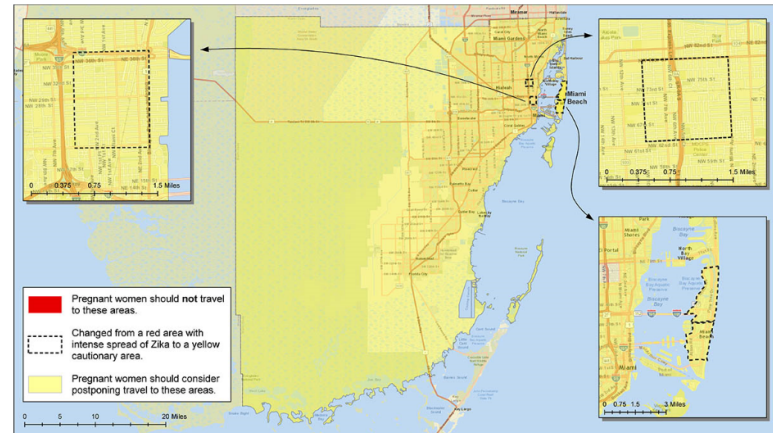
- Monitor and report cases.
- Conduct studies to learn more about the potential link between Zika and Guillain-Barré syndrome.
- Create action plans for state and local health officials to improve Zika preparedness.
- Publish and disseminate guidelines to inform testing and treatment of people with suspected or confirmed Zika.
- 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 reported in Miami-Dade County, Florida, and Brownsville, Texas.
- Pregnant women should consider postponing travel to 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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