



South Carolina Zika Forum

TUESDAY, APRIL 19, 2016



Zika Virus and Health

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Promoting and Protecting the Health of the Public and the Environment



Zika Virus

- History
- Epidemiology
- Current Distribution
- Clinical Manifestations and Complications
- Disease Surveillance and Screening Recommendations
- Resources



Zika Virus History

- First discovered in the Zika Forest in Uganda in 1947
- The first human cases were detected in 1952
- Zika virus occurrence 1951 – 2014
 - in population surveys of blood samples
 - in outbreaks in Africa, Southeast Asia, Pacific Islands
- Zika first emerged in the Western Hemisphere in May 2015
- Activity is now ongoing in Central and South America, Mexico, the Caribbean, Pacific Islands and U.S. territories

Zika Clinical Presentation

- Only 1 in 5 become ill
- Illness from Zika infection is usually mild; symptoms last from several days to a week and resolve
 - Most common symptoms: fever, diffuse rash, joint pain, headache and conjunctivitis (red eyes)
 - Virus is typically present in blood for about one week
- Severe disease is uncommon; deaths are rare and are associated with other underlying conditions





Treatment

- There is no specific medication for treatment and there is currently no vaccine to prevent Zika infection.
- Treatment is supportive for symptoms: rest, fluids, medication for pain or fever.
- Aspirin and NSAIDs are not recommended until dengue is ruled out due to the risk of hemorrhage with dengue.



Complications of Zika Virus Infection

- Zika infection during pregnancy
 - Miscarriage
 - Microcephaly
 - The range of birth defects is unknown
- Post-infection complications
 - Guillain-Barre
 - Other nervous system diseases



Zika Virus Epidemiology

- Zika is a flavivirus in the same family as Dengue, Yellow Fever, West Nile and Japanese Encephalitis viruses.
- Blood surveys in populations show evidence of widespread occurrence and evidence of unrecognized infections.
- Zika virus is transmitted to people primarily by the bite of infected mosquitos.
- Other modes of transmission include: from mother to fetus, sexual contact, laboratory exposures and blood transfusions.
- Populations at highest risk are those with potential exposure to infected mosquitos.



Disease Surveillance

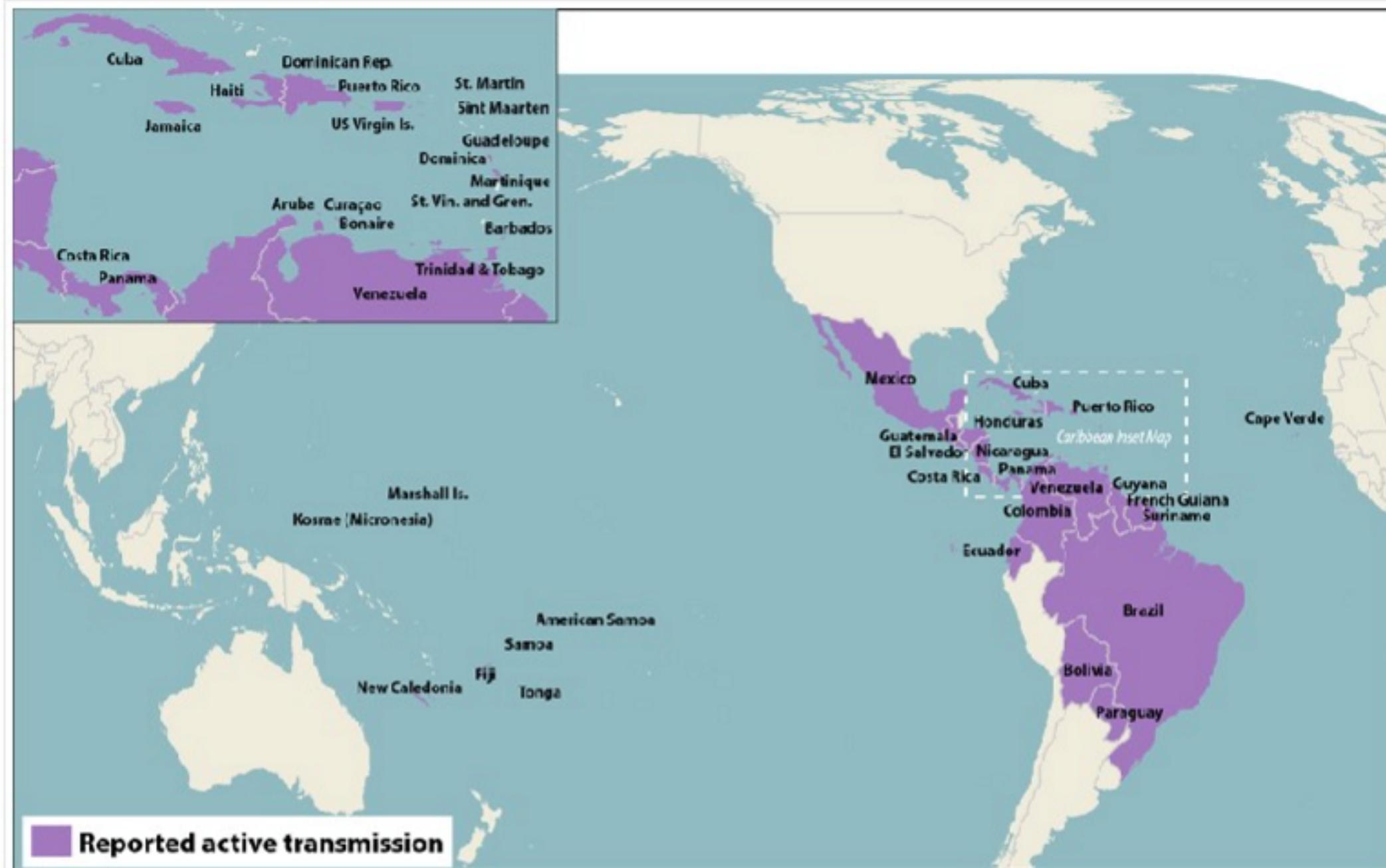
- Public health officials maintain disease surveillance to identify the geographic occurrence and burden of Zika cases.
- Disease detection relies on health care providers recognizing symptoms and reporting suspect cases to public health officials for testing.
- The DHEC Bureau of Labs performs Zika screening tests. Confirmatory testing by CDC is required.



Screening Recommendations

- Screening may be recommended for people with a history of symptoms associated with Zika and/or people who have recently traveled to an area with Zika.
- Testing can be offered from two to 12 weeks after pregnant women return from areas with Zika.
- Positive tests may come from individuals with acute or remote infection.
- DHEC will provide information to mount effective response actions for specific circumstances.

All Countries and Territories with Active Zika Virus Transmission





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Zika virus disease in the United States, 2015–2016

As of April 6, 2016 (5 am EST)

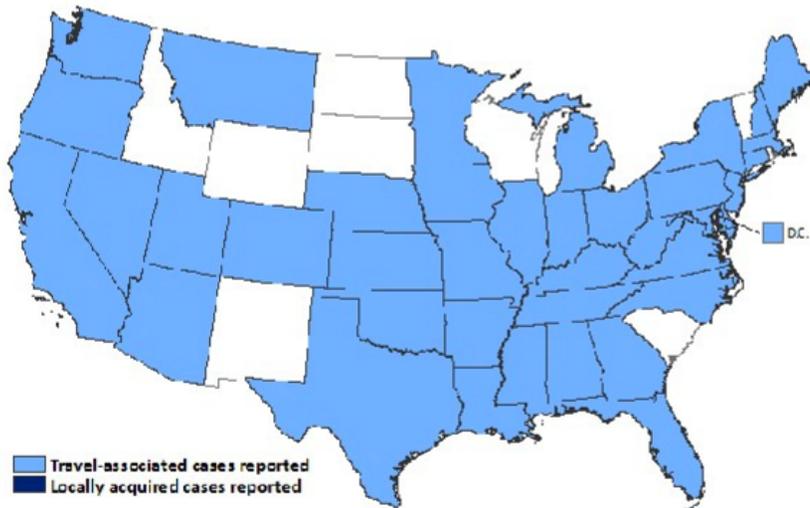
- Zika virus disease and Zika virus congenital infection are nationally notifiable conditions.
- This update from the CDC Arboviral Disease Branch includes provisional data reported to ArboNET for January 1, 2015 – April 6, 2016.

US States

- Travel-associated Zika virus disease cases reported: 346
- Locally acquired vector-borne cases reported: 0
- Of the 346 cases reported, 32 were pregnant women, 7 were sexually transmitted, and 1 had Guillain-Barré syndrome

US Territories

- Travel-associated cases reported: 3
- Locally acquired cases reported: 351
- Of the 354 cases reported, 37 were pregnant women and 1 had Guillain-Barré syndrome



- Primary risk is to travelers to areas with ongoing Zika virus transmission (www.cdc.gov/zika/geo/)
- As of April 13th, 358 travel-associated cases have been reported in the continental U.S.
- **Local transmission has not been reported in the continental U.S.**
- Ongoing transmission in the U.S. is not expected



Prevention

- The primary focus is on the elimination of mosquito vectors and avoiding exposure to mosquitoes.
- Individuals with suspected mosquito-borne illnesses are advised to avoid mosquitoes during the time they could be viremic to prevent local infection of mosquitoes.



Sick with chikungunya, dengue, or Zika?

Protect yourself and others from mosquito bites during the first week of illness.
If a mosquito bites you, it can get infected, bite other people, and make them sick.



Protect yourself from mosquito bites



• Wear long-sleeved shirts and long pants.



• Use door and window screens to keep mosquitoes outside.



• Use insect repellent.



For more information:

www.cdc.gov/chikungunya
www.cdc.gov/dengue
www.cdc.gov/zika

Watch for these symptoms

See your doctor if you develop a fever with:

- Muscle or joint pain
- Headache or pain behind eyes
- Rash
- Red eyes



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



Zika Resources

CDC: www.cdc.gov/zika

<http://www.cdc.gov/zika/pdfs/zika-key-messages.pdf>

DHEC: www.scdhec.gov/Zika



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