Agenda

- Background
- Zika 101
  - Recommendations and challenges
- Current situation
- Response
Agenda

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May 2015

Total countries & territories

1

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes

- Brazil

October 2015

Total countries & territories

2

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes

- Brazil
- Colombia

November 2015

Total countries & territories

8

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes:
- Brazil
- Colombia
- El Salvador
- Guatemala
- Mexico
- Paraguay
- Suriname
- Venezuela

December 2015

Total countries & territories

13

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes

- Brazil
- Colombia
- El Salvador
- Guatemala
- Mexico
- Paraguay
- Suriname
- Venezuela
- French Guiana
- Honduras
- Martinique
- Panama
- Puerto Rico

January 2016

Total countries & territories

26

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes

- Brazil
- Colombia
- El Salvador
- Guatemala
- Mexico
- Paraguay
- Suriname
- Venezuela
- French Guiana
- Honduras
- Martinique
- Panama
- Puerto Rico
- Bolivia
- US Virgin Islands
- Dominican Republic
- Costa Rica
- Guadeloupe
- Saint Martin
- Nicaragua
- Barbados
- Ecuador
- Guyana
- Jamaica
- Curaçao
- Haiti

February 2016

Total countries & territories

32

- Brazil
- Colombia
- El Salvador
- Guatemala
- Mexico
- Paraguay
- Suriname
- Venezuela
- French Guiana
- Honduras
- Martinique
- Panama
- Puerto Rico
- Bolivia
- US Virgin Islands
- Dominican Republic
- Costa Rica
- Guadeloupe
- Saint Martin
- Nicaragua
- Barbados
- Ecuador
- Guyana
- Jamaica
- Curaçao
- Haiti
- Peru
- Saint Vincent and the Grenadines
- Sint Maarten
- Trinidad and Tobago
- Aruba
- Bonaire

May 2016

Total countries & territories

39

Countries/territories with lab-confirmed Zika virus transmitted by mosquitoes

- Brazil
- Colombia
- El Salvador
- Guatemala
- Mexico
- Paraguay
- Suriname
- Venezuela
- French Guiana
- Honduras
- Martinique
- Panama
- Puerto Rico
- Bolivia
- US Virgin Islands
- Dominican Republic
- Costa Rica
- Guadeloupe
- Saint Martin
- Nicaragua
- Barbados
- Ecuador
- Guyana
- Jamaica
- Curaçao
- Haiti
- Peru
- Saint Vincent and the Grenadines
- Sint Maarten
- Trinidad and Tobago
- Aruba
- Bonaire
- Cuba
- Dominica
- St. Lucia
- Belize
- St. Barthelemy
- Grenada
- Argentina

Number of PubMed Citations per Month: “Zika Virus”

* As of June 1, 2016
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- Background
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What is Zika virus disease (Zika)?

- Disease spread primarily through the bite of an Aedes species mosquito infected with Zika virus.

- Many people infected with Zika virus won’t have symptoms or will only have mild symptoms.
How is Zika transmitted?

- Zika can be transmitted through:
  - Mosquito bites
  - From a pregnant woman to her fetus
  - Sexual contact
  - Blood transfusion
  - No reports of infants getting Zika through 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?

- Many people infected with Zika virus won’t have symptoms or will only have mild symptoms.
- Anyone who lives in or travels to an area with Zika and has not already been infected with Zika virus can get it.
How does Zika affect pregnant women?

- Zika virus can pass from a pregnant woman to her fetus during pregnancy or around the time of birth.
How does Zika affect pregnant women?

- Zika infection in pregnancy is a cause of 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.
  - Previous infection will not affect future pregnancies.
How does Zika affect pregnant women?

- Other problems have been detected in pregnancies among fetuses and infants infected with Zika virus before birth.
- Scientists are studying the full range of other potential health problems that Zika virus infection during pregnancy may cause.
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.
How is Zika diagnosed?

- Diagnosis of Zika is based on a person’s recent travel history, symptoms, and results of laboratory tests.
How is Zika diagnosed?

- Symptoms of Zika are similar to other illnesses spread through mosquito bites, like dengue and chikungunya.
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.
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Preventing Mosquito Bites
Zika is primarily transmitted through mosquito bites. Protect yourself.
Keep mosquitoes outside

- Keep mosquitoes out of your home or hotel.
  - Stay in places with air conditioning and with window/door screens.
  - Do not leave doors propped open.
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. Mosquitos lay eggs near water.
  - Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitos cannot get inside to lay eggs
  - If you have a septic tank, repair cracks or gaps
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.
Create a barrier between you and mosquitoes

- Cover up!
  - Wear long-sleeved shirts and long pants.
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.
  - If treating items yourself, always follow the product instructions.
  - Do not use permethrin products directly on skin.
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
  - 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 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.
Protect your partner

- We do not know how long the virus can stay in the semen of men who have had Zika, or 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.
Protect your partner

- Not having sex is the only way to be sure that someone does not get sexually transmitted Zika virus.
- Men with a pregnant partner who live in or traveled to an area with Zika:
  - Use a condom every time you have sex or do not have sex during the pregnancy.
  - This includes vaginal, anal, or oral (mouth-to-penis) sex.
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## Countries and territories reporting mosquito-borne Zika virus transmission

<table>
<thead>
<tr>
<th>Classification</th>
<th>WHO Regional Office</th>
<th>Country / territory / area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1. Countries and territories experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitos.</strong></td>
<td>AFRO</td>
<td>Cabo Verde</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>AMRO/PAHO</td>
<td>Argentina⁵, Aruba, Barbados, Belize, Brazil, Bolivia (Plurinational State of), BONAIRE – Netherlands, Colombia, Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, Ecuador, El Salvador, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru⁵, Puerto Rico, Saint Barthelemy, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad &amp; Tobago, United States Virgin Islands, Venezuela (Bolivarian Republic of)</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>SEARO</td>
<td>Maldives</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>WPRO</td>
<td>American Samoa, Fiji, Marshall Islands, Samoa, Tonga</td>
<td>5</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>46</strong></td>
</tr>
<tr>
<td><strong>Category 2. Countries and territories where there is evidence of Zika virus transmission from 2007 to 2014, with or without ongoing transmission; or countries where an outbreak since 2007 is reported to be over.</strong></td>
<td>AFRO</td>
<td>Gabon</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SEARO</td>
<td>Bangladesh, Indonesia, Thailand</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WPRO</td>
<td>Cambodia, Cook Islands, French Polynesia, Lao People’s Democratic Republic, Malaysia, Micronesia (Federated States of)⁶, New Caledonia, Papua New Guinea, Philippines, Solomon Islands, Vanuatu, Vietnam</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>PAHO</td>
<td>ISLA DE PASCUA – Chile⁵</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>63</strong></td>
</tr>
</tbody>
</table>

¹5️⃣: Plurinational State of
⁶️⃣: Federated States of

WHO Situation Report: Zika Virus, Microcephaly, Guillain-Barré Syndrome. 5/26/16
### Countries reporting non vector-borne Zika virus transmission

<table>
<thead>
<tr>
<th>Classification</th>
<th>WHO Regional Office</th>
<th>Country / territory / area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries with evidence of person-to-person transmission of Zika virus, other than mosquito-borne transmission</td>
<td>AMRO/PAHO</td>
<td>Argentina, Canada, Chile, Peru, United States of America</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>EURO</td>
<td>France, Germany, Italy, Portugal</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>WPRO</td>
<td>New Zealand</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>
Countries, territories and areas reporting microcephaly and/or CNS malformation cases potentially associated with Zika virus infection

<table>
<thead>
<tr>
<th>Reporting country or territory</th>
<th>Number of microcephaly and/or CNS malformation cases suggestive of congenital infections or potentially associated with a Zika virus infection</th>
<th>Probable location of infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1434\textsuperscript{5}</td>
<td>Brazil</td>
</tr>
<tr>
<td>Cabo Verde</td>
<td>3</td>
<td>Cabo Verde</td>
</tr>
<tr>
<td>Colombia</td>
<td>7</td>
<td>Colombia</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>8</td>
<td>French Polynesia</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>1</td>
<td>Marshall Islands</td>
</tr>
<tr>
<td>Martinique</td>
<td>3\textsuperscript{6}</td>
<td>Martinique</td>
</tr>
<tr>
<td>Panama</td>
<td>4</td>
<td>Panama</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>1</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Slovenia\textsuperscript{7}</td>
<td>1</td>
<td>Brazil</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td>Colombia</td>
</tr>
<tr>
<td>United States of America\textsuperscript{8,9}</td>
<td>2</td>
<td>Brazil; Mexico, Belize or Guatemala (undetermined)</td>
</tr>
</tbody>
</table>
Countries, territories or areas reporting Guillain-Barré syndrome (GBS) potentially associated with Zika virus infection

<table>
<thead>
<tr>
<th>Classification</th>
<th>Country / territory / area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported increase in incidence of GBS cases, with at least one GBS case with confirmed Zika virus infection</td>
<td>Brazil, Colombia, Dominican Republic, El Salvador*, French Polynesia, Honduras, Suriname, Venezuela (Bolivarian Republic of)</td>
</tr>
<tr>
<td>No increase in GBS incidence reported, but at least one GBS case with confirmed Zika virus infection</td>
<td>French Guiana, Haiti, Martinique, Panama, Puerto Rico</td>
</tr>
</tbody>
</table>

*GBS cases with previous history of Zika virus infection were reported by the International Health Regulations (2005) National Focal Point in United States of America.
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WHO: Key response interventions

- Public health risk communication and community engagement activities
- Vector control and personal protection against mosquitoes
- Care for those affected and advice for their caregivers
What is CDC doing?

- Activated Emergency Operations Center (EOC) to level 1
- Providing on-the-ground support in affected areas
- Educating healthcare providers and the public about Zika
- Posting travel notices and other travel-related guidance
- Providing laboratories with diagnostic tests
- Creating and distributing Zika Prevention Kits for affected US territories
- Conducting a study to evaluate the persistence of Zika virus in semen and urine among male residents of the United States
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
Recommended resources

• General information on Zika virus: http://www.cdc.gov/zika
• Latest CDC guidance (all): Morbidity and Mortality Weekly Report (MMWR)
  – http://www.cdc.gov/mmwr
• CDC clinical guidance in US: Clinician Outreach and Communication Activity (COCA)
  – http://emergency.cdc.gov/coca
• Epidemiologic updates on Zika virus outbreak:
  – WHO (global): Zika virus and complications
  – PAHO (Americas region): Zika virus infection website
Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)

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.