1.0 Introduction

Zika virus disease (Zika) is a disease caused by Zika virus that is spread to people primarily through the bite of an infected Aedes species mosquito. The most common symptoms of Zika are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito. People usually don't get sick enough to go to the hospital, and they very rarely die of Zika. For this reason, many people might not realize they have been infected. Once a person has been infected, he or she is likely to be protected from future infections.

2.0 Prevention

When traveling to countries where Zika virus or other viruses spread by mosquitoes are found, take the following steps:

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breast-feeding women.
  - Always follow the product label instructions.
  - Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen before applying insect repellent.

3.0 Symptoms

- About 1 in 5 people infected with Zika virus become ill (i.e., develop Zika).
- The most common symptoms of Zika are fever, rash, joint pain, or conjunctivitis (red eyes). Other common symptoms include muscle pain and headache. The incubation period (the time from exposure to symptoms) for Zika virus disease is not known, but is likely to be a few days to a week.
- The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito.
- People usually don't get sick enough to go to the hospital, and they very rarely die of Zika. For this reason, many people might not realize they have been infected.
• Zika virus usually remains in the blood of an infected person for about a week but it can be found longer in some people.

4.0 Action Plan

• **General Readiness:** There are no confirmed cases of zika among students or faculty while in Costa Rica. Faculty should continually remind students of the need to protect themselves from mosquitos. Refer them to the prevention section of their zika handouts.

• **Heightened Readiness:** The faculty learn that one or more cases of zika has been contracted by a student in the Costa Rica program. The faculty member should immediately notify their guide and Ms. Gabriela Guiterrez of the infection. They will then direct the student to the nearest medical facility for treatment. Treatment for zika virus is as follows:

  • Get plenty of rest.
  • Drink fluids to prevent dehydration.
  • Take medicine such as acetaminophen (Tylenol®) to relieve fever and pain.
  • Do not take aspirin and other non-steroidal anti-inflammatory drugs.
  • If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.

  The infected student(s) will be sheltered and quarantined at the hotel until such time as it is deemed they are no longer a threat to the remaining students.

  Additionally, at this time, the faculty should notify Ms. Pat Mouille and Dr. Gwen Fontenot of the incident such that the University is officially notified.

• **Travel restrictions may be implemented by the State or Federal government while we are in country.** Students will be sheltered in place until such time as the University can initiate a plan to allow for our safe return to the United States.
Zika Virus Facts, Prevention and Risks
Costa Rica 2016

Zika virus disease (Zika) is a disease caused by Zika virus that is spread to people primarily through the bite of an infected Aedes species mosquito. The most common symptoms of Zika are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito. People usually don’t get sick enough to go to the hospital, and they very rarely die of Zika. For this reason, many people might not realize they have been infected. Once a person has been infected, he or she is likely to be protected from future infections.

Symptoms:

- About 1 in 5 people infected with Zika virus become ill (i.e., develop Zika).
- The most common symptoms of Zika are fever, rash, joint pain, or conjunctivitis (red eyes). Other common symptoms include muscle pain and headache. The incubation period (the time from exposure to symptoms) for Zika virus disease is not known, but is likely to be a few days to a week.
- See your healthcare provider if you are pregnant and develop a fever, rash, joint pain, or red eyes within 2 weeks after traveling to a place where Zika has been reported. Be sure to tell your healthcare provider where you traveled.
- The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito.
- People usually don’t get sick enough to go to the hospital, and they very rarely die of Zika. For this reason, many people might not realize they have been infected.
- Zika virus usually remains in the blood of an infected person for about a week but it can be found longer in some people.

Treatment:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine such as acetaminophen (Tylenol®) to relieve fever and pain.
- Do not take aspirin and other non-steroidal anti-inflammatory drugs.
- If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.

If you have Zika, prevent mosquito bites for the first week of your illness.

- During the first week of infection, Zika virus can be found in the blood and passed from an infected person to a mosquito through mosquito bites.
- An infected mosquito can then spread the virus to other people.
Prevention:

When traveling to countries where Zika virus or other viruses spread by mosquitoes are found, take the following steps:

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breast-feeding women.
  - Always follow the product label instructions.
  - Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen before applying insect repellent.


Study Abroad 2016:

If you feel you have been infected and are experiencing symptoms similar to those described above, notify your professor (Dr. Lanier or Dr. Cauvin) immediately.
CDC'S RESPONSE TO ZIKA
WHAT WE KNOW
AND WHAT WE DON'T KNOW.

What we know

- Zika can be spread from a mother to her fetus during pregnancy.
- Infection during pregnancies is linked to birth defects in babies.
- Zika is spread mostly by the bite of an infected Aedes species mosquito.
- These mosquitoes are aggressive daytime biters. They can also bite at night.
- Zika is not currently found in the continental US. The mosquitoes that can carry Zika are found in some areas of the US.
- Because the mosquitoes that spread Zika virus are found throughout the tropics, outbreaks will likely continue.
- There is no vaccine or medicine for Zika.

What we don’t know

- If there’s a safe time during your pregnancy to travel to an area with Zika
- If you do travel and are bitten
  - How likely you are to get Zika
  - How likely it is that your baby will have birth defects from the infection

For more information: www.cdc.gov/zika
Mosquito Bite Prevention for Travelers

Mosquitoes spread many types of viruses and parasites that can cause diseases like chikungunya, dengue, Zika, and malaria. If you are traveling to an area where malaria is found, talk to your healthcare provider about malaria prevention medication that may be available.

Protect yourself and your family from mosquito bites. Here's how:

**Keep mosquitoes out of your hotel room or lodging**
- Choose a hotel or lodging with air conditioning or screens on windows and doors.
- Sleep under a mosquito bed net if you are outside or in a room that is not well screened. Mosquitoes can live indoors and will bite at any time, day or night.
  - Buy a bed net at your local outdoor store or online before traveling overseas.
  - Choose a WHOPES-approved bed net (like Prama®): compact, white, rectangular, with 156 holes per square inch, and long enough to tuck under the mattress.
  - Permethrin-treated bed nets provide more protection than untreated nets.
    - Permethrin is an insecticide that kills mosquitoes and other insects.
    - Do not wash bed nets or expose them to sunlight. This will break down the insecticide more quickly.
  - For more information on bed nets: [www.cdc.gov/malaria/malaria_worldwide/reduction/tn.html](http://www.cdc.gov/malaria/malaria_worldwide/reduction/tn.html)

**Cover up!**
- Wear long-sleeved shirts and long pants.
- Mosquitoes may bite through thin clothing. Treat clothes with permethrin or another Environmental Protection Agency (EPA)-registered insecticide for extra protection.

**Use only an EPA-registered insect repellent**
- When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.
- Consider bringing insect repellent with you.
- Always follow the product label instructions.
- Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen first and insect repellent second.
- The effectiveness of non-EPA registered insect repellents, including some natural repellents, is not known.
- To protect yourself against diseases like chikungunya, dengue, and Zika, CDC and EPA recommend using an EPA-registered insect repellent.
- For more information: [www2.epa.gov/insect-repellent](http://www2.epa.gov/insect-repellent)
Use an insect repellent with one of the following active ingredients:

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Some brand name examples*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher percentages of active ingredient provide longer protection</td>
<td>(Insect repellents may be sold under different brand names overseas.)</td>
</tr>
<tr>
<td><strong>DEET</strong></td>
<td>Off!, Cutter, Sawyer, Ultrathon</td>
</tr>
<tr>
<td><strong>Picaridin, also known as KBR 3023, Bayrepel, and icaridin</strong></td>
<td>Skin So Soft Bug Guard Plus, Autan (outside the United States)</td>
</tr>
<tr>
<td><strong>Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)</strong></td>
<td>Repel</td>
</tr>
<tr>
<td><strong>IR3535</strong></td>
<td>Skin So Soft Bug Guard Plus Expedition, SkinSma</td>
</tr>
</tbody>
</table>

If you are travelling with a baby or child:

- Always follow instructions when applying insect repellent to children.
- **Do not** use insect repellent on babies younger than 2 months of age.
- Instead, dress infants or small children in clothing that covers arms and legs, or cover the crib, stroller, and baby carrier with mosquito netting.
  - Adults: Spray insect repellent onto your hands and then apply to a child's face. Do not apply insect repellent to a child’s hands, mouth, cut or irritated skin.
- Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years of age.

Treat clothing and gear:

- Use permethrin to treat clothing and gear (such as boots, pants, socks, tents) or purchase 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.

* The use of commercial names is to provide information about products; it does not represent an endorsement of these products by the Centers for Disease Control and Prevention or the U.S. Department of Health and Human Services.
CDC recommends special precautions for pregnant women and women trying to become pregnant

Pregnant?
Pregnant women and their male partners should strictly follow steps to prevent mosquito bites.

If you have a male sex partner who lives in or travels to an area with Zika, you should use condoms the right way every time you have sex, or do not have sex during the pregnancy.

If you develop the symptoms of Zika, see a healthcare provider right away for testing.

Trying to become pregnant?
Women trying to become pregnant and their male partners should strictly follow steps to prevent mosquito bites.

Talk to your healthcare provider about plans to become pregnant.

Your Best Protection: Prevent Mosquito Bites

Clothing
- Wear long-sleeved shirts and long pants.
- Treat clothing and gear with permethrin or purchase permethrin-treated items.
  - Treated clothing remains protective after multiple washings. See product information to learn how long the protection will last.
  - If treating items yourself, follow the product instructions carefully.
- Do NOT use permethrin products directly on skin. They are intended to treat clothing.

Indoor Protection
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Sleep under a mosquito bed net if air conditioned or screened rooms are not available or if sleeping outdoors.

Repellent
Use Environmental Protection Agency (EPA)-registered insect repellents. When used as directed, these insect repellents are safe and effective for pregnant and breastfeeding women.
- Always follow the product label instructions.
- Reapply as directed.
- Do not spray repellent on the skin under clothing.
- If you are also using sunscreen, apply sunscreen before applying insect repellent.

www.cdc.gov/zika
What we know about Zika
- Zika can be passed from a mother to her fetus during pregnancy.
- Infection with Zika during pregnancy is linked to birth defects in babies.
- Zika is spread mostly by the bite of an infected Aedes species mosquito.
  » These mosquitoes are aggressive daytime biters. They can also bite at night.
- There has been no local transmission of Zika in the continental US.
- There is no vaccine to prevent or medicine to treat Zika.
- Zika can be spread by a man to his sex partners.

What we don’t know about Zika
- If there’s a safe time during your pregnancy to travel to an area with Zika.
- If you do travel and are infected, how likely it is that the virus will infect your fetus and if your baby will have birth defects from the infection.

Travel Notice
CDC has issued a travel notice (Level 2-Practice Enhanced Precautions) for people traveling to areas where Zika virus is spreading.

- For a current list of places with Zika outbreaks, see CDC’s Travel Health Notices: http://wwwnc.cdc.gov/travel/page/zena-travel-information
- This notice follows reports in Brazil of microcephaly and other poor pregnancy outcomes in babies of mothers who were infected with Zika virus while pregnant.

Symptoms of Zika
About 4 out of 5 people with Zika won’t even know they have it. The illness is usually mild with symptoms lasting for several days to a week.

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