

Zika Virus

Workplace Safety and Health
Preparedness Guidance

June 2016



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Background

- The World Health Organization (WHO) has designated the Zika virus as an international public health emergency.
- Additionally, the Zika virus is found in sub-Saharan Africa, the Caribbean, and Central and South America.
- The Zika virus was identified more than 50 years ago. The virus has been identified in various areas of the world for the past few decades.



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What CDC is doing,

<http://www.cdc.gov/zika/cdc-role.html>

Background

- The epicenter of the current outbreak is centered in Brazil.
- Over one million people have become infected.
- Territories in the US that have reported direct mosquito transmission are Samoa, Guam, and Puerto Rico.



Areas with Zika - As of February 9, 2016, <http://www.cdc.gov/zika/geo/index.html>



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Public Health Concerns

- Microcephaly, a rare congenital condition where the cranium in human embryos is deformed, causing reduced development of the brain in infants carried to full term. The expectant mother must have the virus for this event to occur. The link to this disorder is still under investigation.
- Guillain-Barre syndrome, a rare condition that can cause paralysis which can spontaneously resolve or can become permanent.
- In most people, the illness caused by the Zika virus is mild with common symptoms which include, fever, rash, joint pain, conjunctivitis (red eyes) and/or body aches.



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Public Health Concerns (Continued)

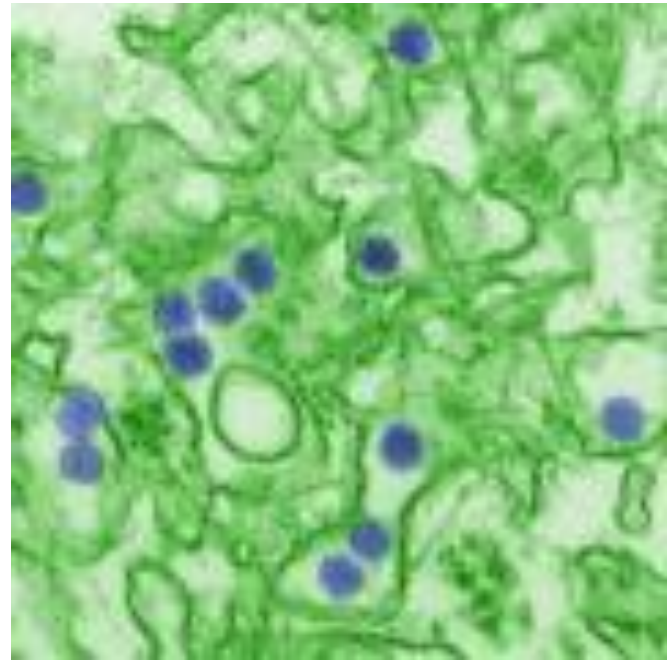
- The transmission of the Zika virus is typically from the bite of the *Aedes* mosquito.
- The *Aedes* mosquito is also the transmission agent for other tropical illnesses such as Dengue Fever, Yellow Fever, and the Chikungunya virus.
- These insects are found throughout much of the world, including the southern United States and its territories that include tropical geographic areas. Recent reports have also associated the transmission of the Zika virus through sexual contact.



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How Zika Is Spread

- The Zika virus is primarily transmitted to humans by infected mosquitos and mainly occurs in tropical areas.
- Directly transmitted from an infected person to a non- infected person through sexual contact.
- Transmitted in utero (from infected mother to embryo).



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Symptoms

- The CDC estimates that about 1 in 5 individuals infected with the Zika virus will develop symptoms which include a fever, rash, headaches, generalized joint pain, and red eyes (conjunctivitis).
- Many individuals will be actively infected but develop no apparent symptoms. These individuals can still transmit the disease.
- It is rare for an individual who is infected with the Zika virus to become gravely ill, or to die from the disease.



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Possible Exposure Pathways

Risk increases in areas where:

- There is stagnant water;
- Buildings are not equipped with screens and windows; and
- Climatic conditions encourage less clothing.
- Exposure risks can be reduced by using proactive prevention and control.



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Prevention & Control

- If possible, stay indoors at dawn and dusk.
- Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.
- Keep unscreened windows and doors closed.
- Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- Inform building managers of window and door repairs needed in the workplace and at supplied places of accommodation.



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Prevention & Control (Continued)

- Precautions need to be taken when working around mosquito breeding grounds such as areas where water is stored for consumption and deteriorating or damaged infrastructure.
- Prevent contact with and/or remove breeding grounds for mosquitoes.
- Eliminate or avoid standing water around work areas, especially after rain. This might include items such as old tires; discarded plastic food containers; metal drums; tree holes; leaves that form “cups” and catch water; or other containers that may collect water. Unused containers should be stored upside down to avoid collecting water.



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Prevention & Control (Continued)

Since there is no vaccination, the following options are highly recommended:

- Wear clothing lighter in color;
- Wear long-sleeved shirts and long pants and socks;
- Wear Hats and/or mosquito netting hats;
- Increase self-awareness from credible broadcast public health notices;
- Coordinate with your supervisor to report illnesses and risk concerns; and
- Schedule outside working hours to avoid times of twilight.



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Prevention & Control (Continued)

- 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.
- An alternative to manmade repellents is oil of lemon eucalyptus (OLE).
- Always follow the product label instructions.
- Reapply insect repellent as directed.



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Prevention & Control (Continued)

- Do not spray repellent on the skin under clothing.
- If you are also using sunscreen, apply sunscreen before applying insect repellent.
- Treat clothing and gear with the ingredient “permethrin”20% 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.



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First Aid

Since there are no medications or vaccines for the Zika virus you are advised to do the following:

- Wash mosquito bite areas with soap and water;
- Use an ice pack to reduce swelling if needed;
- Treat itching with over the counter antihistamines such as diphenhydramine in a topical cream/gel; Calamine or Aveeno (oatmeal based) anti-itch lotion may also be used; and
- If you think you have Zika disease see your health care provider.



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Additional Resources

- The Centers for Disease Control (CDC):
<http://www.cdc.gov/zika/>
- The World Health Organization (WHO):
<http://who.int/features/qa/zika/en/>



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This presentation has been developed in conjunction with information provided by the U.S. Department of Health & Human Services, Center for Disease Control, <http://www.cdc.gov/zika/index.html>. The source of photographs used in this presentation were taken from the CDC Public Health Image Library (PHIL), <http://phil.cdc.gov/phil/home.asp> unless otherwise noted.