

Zika Virus

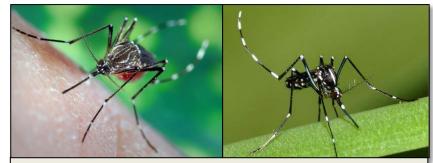
FACT SHEET 18-085-0216

Just the Facts...

Zika (zee-kah) virus is primarily spread from an infected person to an uninfected person through the bite of an infected Aedes species mosquito. Although most infections do not cause symptoms and do not require treatment, Zika infection may cause birth defects in pregnant women. Outbreaks of Zika have occurred in

parts of Africa, Southeast Asia, and the Pacific Islands. Zika spread to the Western Hemisphere in 2015 and is estimated to have affected more than a million people in South and Central America, Mexico, and the Caribbean, including Puerto Rico and the Virgin Islands. Cases of Zika virus infection have been identified in the continental United States in travelers who returned from an area with ongoing disease transmission. There have not been any mosquito transmitted cases of Zika infection in the U.S. Zika virus infection can be prevented by protecting against mosquito bites and eliminating mosquito breeding areas.

How do people become infected with Zika virus? The disease is spread to people primarily through the bite of an infected *Aedes* species mosquito. These are the same mosquitoes that spread dengue and chikungunya viruses. These mosquitoes are aggressive daytime biters. They can also bite at night, indoors and around the outside of homes. The yellow fever mosquito (*Ae. aegypti*), and the Asian tiger mosquito (*Ae. albopictus*) have been implicated in large outbreaks of Zika virus. Recent evidence suggests that Zika virus can also be spread through sexual activity, blood transfusion and from mother to fetus during pregnancy. The U.S. Centers for Disease Control and Prevention (CDC) is aware of increased numbers of babies with microcephaly (smaller than expected head size) in Brazil and is currently supporting the investigation into possible links with the Zika



Aedes aegypti (left) and Aedes albopictus (right). These mosquitoes are important transmitters of Dengue, Chikungunya, and Zika viruses. Photos: CDC

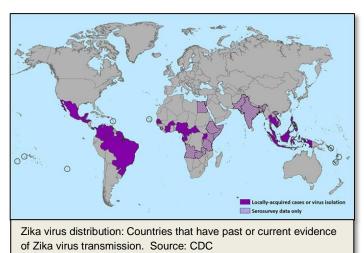
virus infection. There are currently no reports of infants getting Zika virus through breastfeeding. The CDC is also investigating a possible link between Zika virus and Guillain-Barré syndrome, a rare disorder in which the body's immune system attacks part of the nervous system.

What are the signs and symptoms of Zika virus infection? Symptoms usually begin 2-7 days after being bitten by an infected mosquito. Common symptoms include fever, rash, joint pain and red eyes. Other symptoms include muscle pain, headache, pain behind the eyes, and vomiting. As symptoms are often mild, infection may go unrecognized or be misdiagnosed. Only about one in five people infected with Zika virus will develop symptoms.

Is there a diagnostic test available to confirm Zika virus infection in humans? Yes, your healthcare provider may order blood tests for Zika or other viruses with similar symptoms as Zika that spread by the same type of mosquitoes. See your healthcare provider if you have recently traveled to affected areas and have developed the symptoms described above.

Is there a treatment for Zika virus infection? There is no vaccine or specific treatment available. Persons experiencing Zika virus symptoms should rest and drink plenty of fluids. Take medicine such as acetaminophen (TYLENOL®), to relieve fever and pain. DO NOT TAKE aspirin and other non-steroidal anti-inflammatory drugs until other diseases can be ruled out by your medical care provider.

What should I do if I think I am infected with Zika virus? Seek medical attention if you experience the symptoms described above and have traveled to an area where Zika occurs. Be sure to tell your healthcare provider your recent travel history. If you think you have Zika, avoid mosquito bites to prevent the virus from spreading to others.



What can I do to reduce my risk of becoming infected with Zika virus? If you are pregnant or trying to become pregnant and traveling to areas where Zika virus transmission is ongoing the CDC has provided the following interim recommendations (http://wwwnc.cdc.gov/travel/notices):

- Women who are pregnant (in any trimester): Consider postponing travel to any area where Zika virus transmission is ongoing. If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip. Use of approved insect repellents is safe during pregnancy.
- Women who are trying to become pregnant: Before you travel, talk to your doctor about your plans to become pregnant and the risk of Zika virus infection. Strictly follow steps to prevent mosquito bites during your trip, including use of approved insect repellents.

Zika virus and sex? CDC recommends that men who reside in or have traveled to an area of active Zika virus transmission, and have a pregnant partner should abstain from sexual activity or consistently and correctly use condoms during sex for the duration of the pregnancy.

AVOID MOSQUITO BITES! Using the DoD Insect Repellent System provides the best protection from mosquito bites. It incorporates permethrin repellent on the uniform, DEET or picaridin repellent on exposed skin, a properly worn uniform and sleeping inside a permethrin-treated bed net. Civilian personnel can also purchase or treat clothing with permethrin.

Stay in air-conditioned areas or make sure door and window screens are in place and do not have holes. If practical, minimize time spent outdoors during daylight hours.

ELIMINATE MOSQUITO BREEDING SITES! Search for and remove items that collect water such as plastic containers, flower pots, vases, children's toys, old tires or any other items that can hold water. All standing water is potential mosquito breeding habitat.

How do I know if my uniform is treated with permethrin repellent? Factory-treated permethrin Army Combat Uniforms (ACU Permethrin) are now available to all Soldiers. The ACU Permethrin trouser and coat will have a sewn-in label indicating the uniform is factory-treated with permethrin. If not factory-treated, Soldiers can field-treat using either the IDA Kit (NSN 6840-01-345-0237), which can last up to 50 washings, or the 0.5% aerosol spray can (NSN 6840-01-278-1336), which should be reapplied after six weeks and the sixth washing. When

PERMETHRINTREATED UNIFORM*

DEET OR PICARIDIN PROPERLY PERMETHRINTREATED UNIFORM*

PROPERLY PERMETHRINTREATED BED NET

Use ALL elements for maximum protection!

Using all elements of the DoD Insect Repellent System provides maximum and safe protection from mosquito-borne diseases. Diagram: VID, APHC

applying permethrin, always read and follow the label directions. Permanently mark the uniform label with the permethrin field-treatment date. **NEVER APPLY PERMETHRIN TO THE SKIN!** Aerosol products containing 0.5% permethrin and clothing factory-treated with permethrin are also commercially available for civilian use.

Is it safe for Soldiers who are pregnant, nursing or trying to get pregnant to wear permethrin-treated ACUs? The ACU with permethrin is safe to wear; however, if you are pregnant, nursing or trying to get pregnant you are authorized to temporarily wear an ACU without permethrin. If your uniform is not treated with permethrin (maternity or have a profile) and you and your healthcare provider decide that wearing an ACU with permethrin is the best choice, you can learn how to treat your ACU by following the directions in the question above.

What standard military insect repellent products are available for exposed skin? Approved military insect repellents for use on exposed skin come in a variety of formulations. Always refer to the label to determine frequency of repellent application based on activity. Do not apply repellent to eyes, lips, or to sensitive or damaged skin. Available military repellents are:

- Ultrathon™ (NSN 6840-01-284-3982) contains 33% controlled-release DEFT
- Ultra 30[™] Insect Repellent Lotion (NSN 6840-01-584-8393) contains 30% Lipo DEET.
- Cutter® pump spray (NSN 6840-01-584-8598) contains 25% DEET.
- Sunsect combination sunscreen & repellent (NSN 6840-01-288-2188) contains 20% DEET with SPF 15 sun protection.
- Natrapel® pump spray (NSN 6840-01-619-4795) contains 20% picaridin.

What is considered a "properly worn Army Combat Uniform"? Worn properly, the ACU is a physical barrier against insects, ticks and other disease vectors and biting nuisance pests. Wear ACUs with the sleeves rolled down; tuck pants into boots

All standard approved skin repellents contain the active ingredient DEET or picaridin, and are registered by the U.S. Environmental Protection Agency (USEPA). These products are safe to use and effectively repel mosquitoes, sand flies, fleas, ticks and other potential

disease vectors and pests. Photo: VID, APHC

and undershirt into pants. Wear uniform loosely since mosquitoes can bite through fabric that is pulled tight against the skin. A permethrin-treated uniform does not provide protection to exposed skin; protect exposed skin with an approved insect repellent.

What standard bed nets are available to help protect Soldiers from mosquito bites while sleeping? Treated bed nets provide a barrier between a sleeping Soldier and pests (e.g., mosquitoes/ticks). Lightweight, self-supporting, pop-up bed nets factory-treated with permethrin are available in coyote brown (NSN 3740-01-518-7310) or green camouflage (NSN 3740-01-516-4415) or the Egret bed net (NSN 3740-01-644-4953). Untreated mosquito bed nets (NSN 7210-00-266-9736) should be treated with 0.5% permethrin aerosol spray and assembled properly on a cot. Check for holes in netting and keep loose edges off the ground by tucking them under the sleeping bag.

Where can I get more information on Zika virus?

- Army Public Health Center (APHC) Zika virus website: http://phc.amedd.army.mil/topics/discond/diseases/Pages/Zika.aspx
- Centers for Disease Control and Prevention http://www.cdc.gov/zika/
- World Health Organization http://www.who.int/mediacentre/factsheets/zika/en/

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