



# What Texans Need To Know About ZIKA VIRUS

Sonja L. Swiger, Assistant Professor and Extension Livestock/Veterinary Entomologist  
 Michael Merchant, Professor and Extension Urban Entomologist

## WHAT IS ZIKA?

Zika is a mosquito-transmitted disease caused by the Zika virus. This virus is not new, but from 2007 to 2014 the virus spread into new countries and perhaps became more dangerous to people. The illness caused by the Zika virus is usually mild compared to other mosquito-carried illnesses like dengue fever, West Nile virus, and chikungunya. Only one in five people infected with Zika will feel ill. These individuals typically develop mild symptoms that include fever, joint pain, red itchy eyes (conjunctivitis) and rash. Symptoms typically occur 2 to 7 days after being bitten by an infected mosquito. Symptoms in some individuals may be more severe. The association between Zika and Guillain-Barre syndrome (a type of paralysis) is under investigation.

Until recently, Zika was considered a mild disease with few lasting effects. However, public health officials are now concerned that pregnant women who contract Zika can pass the virus on to their unborn babies, which may result in a birth defect known as microcephaly. Microcephaly is a condition where the fetal brain and head do not fully develop and reach normal size. Currently, there is no vaccine or preventive treatment for Zika, nor is there a cure for microcephaly. For more information about the effects of Zika on humans, see <https://vitalrecord.tamhsc.edu/zika360/>.

## HOW DO I GET ZIKA?

A person gets Zika from the bite of an infected mosquito. In turn, mosquitoes get the virus when they bite a person who is infected with the Zika virus. The best carrier (vector) of the Zika virus is the yellow fever mosquito, *Aedes aegypti*. The Asian tiger mosquito,

*Aedes albopictus*, can also carry the Zika virus. The degree to which *Aedes albopictus* may be contributing to Zika transmission in the Americas is unknown. Both these mosquitoes are common in Texas, and may be found in the same communities.

Since 2002, the most important mosquito-transmitted disease in Texas has been West Nile virus. West Nile virus is carried by a different mosquito, the southern house mosquito, *Culex quinquefasciatus*.

Unlike the *Culex* mosquitoes which fly only at night, *Aedes* mosquitoes are active throughout the day and into the evening. For this reason, it is critical to protect against mosquito bites both day and night.

Under certain circumstances, Zika can also be transmitted sexually from men to women. To date, this is the only way local transmission of Zika is known to have occurred in the United States. In countries where mosquitoes spread Zika, sexual transmission of the virus is relatively less common. For this reason, the US Centers for Disease Control recently recommended that women with confirmed cases of Zika, or who have experienced symptoms of the virus, wait at least eight weeks after the start of their symptoms before trying to get pregnant. Additionally, men with confirmed cases of Zika, or who have had symptoms of the virus, are now advised to wait at least six months after their symptoms begin before having unprotected sex. These recommendations are based on current knowledge of how long the Zika virus remains active in the body and in semen.



*Aedes albopictus* feeding

Any container capable of holding water for 8 to 10 days can produce dozens or hundreds of mosquitoes a day.



## SHOULD I BE WORRIED ABOUT ZIKA?

As of March 2016, the Zika virus has not been locally transmitted by mosquitoes to humans in Texas. Currently, the risk of Zika infection in Texas appears negligible. During the winter and early spring, the principal risk is for travelers to areas where Zika is active. However, local transmission of Zika might be possible during the active mosquito season (average daily temperatures above 75 degrees F) and more people return to the State while infected. This risk is expected to remain low for most of Texas. Your local health department, the Texas Department of State Health Services, and the local media are good sources for changes in the risk of Zika in your area. The most current information on Zika in Texas is at: <http://texaszika.org/>.

## STOPPING ZIKA

There are two steps you can take to reduce your risk of getting Zika or West Nile virus from a mosquito. First, you can make your home environment less likely to breed mosquitoes. Second, you can reduce your risk of a mosquito bite by dressing appropriately and wearing mosquito repellent when you are outdoors.

All mosquitoes require bacteria-laden water in which to breed. *Aedes aegypti* and *Aedes albopictus* mosquitoes breed in small water- and debris-filled containers like bottles and cans, buckets and wheel barrows, tarps, gutters, birdbaths, flower pot dishes, and tires. Any container that can hold water for 8 to 10 days can produce dozens to hundreds of mosquitoes a day. Clean rainwater or irrigation water that fills a container with organic material (leaf debris, grass clippings, etc.) takes about four days to produce enough bacteria to sustain mosquito breeding. Because the mosquitoes that carry Zika fly less than 200 meters from their larval breeding site, most of the biting mosquitoes in your backyard come from containers in your or your close neighbor's

yard. Again, the first step to stopping Zika is to fill or eliminate any water containers around your home. For more information about mosquitoes and how to check your yard for mosquito breeding sites, visit: <http://mosquitosafari.tamu.edu>.

Mosquitoes can bite any time you are outdoors—even for short trips to water the garden or pull weeds. Anyone staying outdoors for extended periods in mosquito-infested areas should wear long sleeves, long pants and light-colored, loose fitting clothing to prevent mosquitoes from biting. Skin applied repellents can also provide good protection for 2 to 12 hours. DEET, picaridin, and IR-3535 are some of the better repellents for exposed skin; however, for shorter exposure times many other effective products are available. For more information about choosing a repellent, see the U.S. Environmental Protection Agency's repellent calculator: <http://www.epa.gov/insect-repellents/find-insect-repellent-right-you>

## PRECAUTIONS FOR TRAVELERS

Texas' proximity to Mexico and other Latin American countries where Zika is common, make it one of the highest risk areas for Zika in the United States. Anyone traveling to and from areas where the Zika virus is present should take special precautions to avoid getting the virus or spreading it to others. This includes avoiding mosquito infested areas, wearing long sleeved shirts and long pants when in mosquito prone areas, and using a good repellent.

In addition to being careful to avoid Zika when traveling, it's important to avoid passing on the Zika virus when you return home. Even travelers who feel well can pass on the Zika virus. Eighty percent of those who get Zika will not know they have been infected. To minimize this risk, returning travelers should wear repellent for at least a week to avoid the possibility of introducing the virus to your community.

For more information and links to resources: <http://preventingzika.org/>

Texas A&M AgriLife Extension Service

[AgriLifeExtension.tamu.edu](http://AgriLifeExtension.tamu.edu)

More Extension publications can be found at [AgriLifeBookstore.org](http://AgriLifeBookstore.org)

Texas A&M AgriLife does not discriminate on the basis of race, color, religion, sex, national origin, disability, age, genetic information, veteran status, sexual orientation or gender identity and provides equal access in its programs, activities, education and employment.