

The Zika Virus

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Zika is a viral disease transmitted by mosquitoes. First isolated in Uganda in 1947, Zika virus is a Flavivirus, related to dengue and West Nile viruses. While periodic Zika outbreaks have been reported since its discovery, Zika was not identified as a global health concern until 2015, when an outbreak in Brazil was linked to a dramatic increase in cases of babies born with microcephaly. Currently, Zika cases are occurring in many countries.

Transmission

Zika virus is transmitted to people primarily through the bite of an infected *Aedes* mosquito, i.e. *Ae. aegypti* and *Ae. albopictus*. These are the same mosquitoes that spread dengue and chikungunya viruses. *Aedes* mosquitoes prefer to live near people and only female mosquitoes bite. They are mostly daytime biters, but can also bite at night. Mosquitoes acquire the virus when they feed on a person during the first week of infection when they are carrying high numbers of Zika virus in their blood. Once inside the mosquito, the virus moves from the digestive tract into the salivary glands, a process which is thought to take about a week. After that time, the mosquito can spread Zika to the next person she bites. Zika virus can also be transmitted from mother to her fetus during pregnancy, through blood transfusions, and through sexual contact.

Symptoms

About 1 in 5 people infected with Zika virus become ill (i.e., develop Zika). The most common symptoms are fever, rash, joint pain, and/or conjunctivitis (red eyes). Other symptoms include muscle pain and headache. The incubation period (the time from infection through a bite to the development of symptoms) is typically between 2 and 7 days. The illness is usually mild with symptoms lasting for a few days to a week. **Severe disease symptoms requiring hospitalization are uncommon. Death due to the virus is rare.** The main health concerns are related to pregnant women and impacts on the developing fetus.

Diagnosis and Treatment

See a healthcare provider if you develop symptoms, particularly if you have visited an area where Zika is common: <http://wwwnc.cdc.gov/travel/page/zika-travel-information>. If you have recently traveled, tell your healthcare provider where and when you traveled. Your blood may be tested for Zika or viruses that cause similar symptoms like dengue and chikungunya.

There is no vaccine for Zika. Treatments for symptoms include rest, drinking plenty of fluids, and medicine such as acetaminophen to relieve fever and pain.

A PDF of this publication is available on-line at:
<http://cals.arizona.edu/apmc/docs/Zika-virus.pdf>

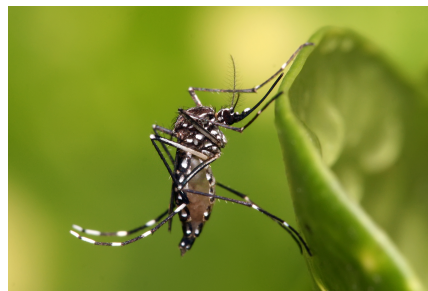


Photo of
*Aedes
aegypti*
adult.
Credit:
M. M.
Karim.

Zika and pregnancy

Zika virus can be passed from mother to her fetus during pregnancy. Pregnant women who have traveled to an area where Zika is common should talk to their obstetrician about recent travel history, even if they are not ill. The Centers for Disease Control and Prevention (CDC) has guidance for healthcare providers caring for pregnant women and women of reproductive age at: <http://www.cdc.gov/zika/hc-providers/qa-pregnant-women.html>. It is especially important that pregnant women see a doctor if they develop a fever, rash, joint pain, or red eyes during or within 2 weeks of traveling to a country where Zika has been reported.

Does Zika in pregnant women cause birth defects?

Brazilian communities have experienced a significant number of Zika cases since May 2015. Officials have also noticed an increase in the number of babies with congenital [microcephaly](#) (a neurological condition in which the brain develops abnormally in the womb, and an infant's head is smaller than the heads of other babies of the same sex and age). Additional studies are needed to determine the degree to which Zika might be linked with microcephaly. Because of the possible association between Zika infection and microcephaly, pregnant women should take steps to prevent mosquito bites. Pregnant women should also minimize their exposure to pesticides.

Prevention and personal protection

The best way to avoid getting Zika virus is to **avoid being bitten by infected mosquitoes**. We can minimize mosquito numbers by eliminating breeding habitats, e.g. standing water in containers, around our homes. When outdoors, dress properly and apply insect repellent. For detailed information on mosquito management, see <http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1221-2013.pdf>

QR codes for resources

Additional information:

For more information on Zika virus, please view CDC website at :
<http://www.cdc.gov/zika/index.html>

Li, S., Gouge, D.H., Fournier, A., Nair, S., Baker, P., Olson, C.
2013. Mosquitoes. University of Arizona Cooperative Extension.
Publication no. AZ1221.
<http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1221-2013.pdf>

For additional information selecting which repellent is right for you, go to the EPA search page:
<http://efpub.epa.gov/oppreff/insect/#searchform>

This material is based upon work that is supported in part by the National Institute of Food and Agriculture, U.S. Department of Agriculture (USDA NIFA) under the Crop Protection and Pest Management, Extension Implementation Program, award number 2014-70006-22488 which provides Extension IPM funding to the University of Arizona. Additional support is provided by the U.S. Environmental Protection Agency (EPA) and the University of Arizona – Arizona Pest Management Center (APMC). Any findings, recommendations, services, or organizations that are mentioned, shown, or indirectly implied in this publication do not imply endorsement by the University of Arizona or the USDA.

