

Zika Virus Disease (Zika)*

* The section below consists of excerpts of Zika virus disease information available on the Centers for Disease Control and Prevention (CDC) website as of June 2016.

Zika virus disease (Zika) is a disease caused by the Zika virus. Zika virus is transmitted to people primarily through the bite of an infected Aedes species mosquito (*A. aegypti* and *A. albopictus*). These are the same mosquitoes that spread [dengue](#) and [chikungunya](#) viruses.

- These mosquitoes typically lay eggs in and near standing water in things like buckets, bowls, animal dishes, flower pots and vases. They prefer to bite people, and live indoors and outdoors near people.
 - Mosquitoes that spread chikungunya, dengue, and Zika are aggressive daytime biters, but they can also bite at night.
- Mosquitoes become infected when they feed on a person already infected with the virus. Infected mosquitoes can then spread the virus to other people through bites.

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. However, Zika virus infection during pregnancy can cause a serious birth defect called [microcephaly](#), as well as other severe fetal brain defects. Once a person has been infected, he or she is likely to be protected from future infections.

What we know

- No vaccine exists to prevent Zika virus disease (Zika).
- Prevent Zika by avoiding mosquito bites (see below).
- Mosquitoes that spread Zika virus bite mostly during the daytime.
- Mosquitoes that spread Zika virus also spread dengue and chikungunya viruses.
- [Prevent sexual transmission of Zika by using condoms or not having sex.](#)

Steps to prevent mosquito bite

When in areas with Zika and other diseases spread by mosquitoes, take the following steps:

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning and window and door screens to keep mosquitoes outside.
- Take steps to [control mosquitoes inside and outside your home](#).
- 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 with one of the following active ingredients: DEET, picaridin, IR3535, oil of lemon eucalyptus, or para-menthane-diol. Choosing an EPA-registered repellent ensures the EPA has evaluated the product for effectiveness. 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.
- To protect your child from mosquito bites:
 - Do not use insect repellent on babies younger than 2 months old.
 - Do not use products containing oil of lemon eucalyptus or para-menthane-diol on children younger than 3 years old.
 - Dress your child in clothing that covers arms and legs.
 - Cover crib, stroller, and baby carrier with mosquito netting.
 - Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
 - Adults: Spray insect repellent onto your hands and then apply to a child's face.
- 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.

Controlling Mosquitoes at Home

Here's what you can do to control mosquitoes **outside** your home:

- Install or repair and use window and door screens. Do not leave doors propped open.
- Once a week, empty and scrub, turn over, cover, or throw out any items that hold water like tires, buckets, planters, toys, pools, birdbaths, flowerpot saucers, or trash containers. Mosquitoes lay eggs near water.
 - Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitoes cannot get inside to lay eggs.
 - For containers without lids, use wire mesh with holes smaller than an adult mosquito.
 - Use larvicides to treat large containers of water that will not be used for drinking and cannot be covered or dumped out.
- Use an outdoor flying insect spray where mosquitoes rest. Mosquitoes rest in dark, humid areas like under patio furniture, or under the carport or garage. When using insecticides, always follow label instructions.
- If you have a septic tank, repair cracks or gaps. Cover open vent or plumbing pipes. Use wire mesh with holes smaller than an adult mosquito.

Here's what you can do to control mosquitoes **inside** your home

- Keep windows and doors shut and use air conditioning when possible.
- Keep mosquitoes from laying eggs inside your home. Once a week, empty and scrub, turn over, cover, or throw out any items that hold water like vases and flowerpot saucers.
- Kill mosquitoes inside your home. Use an indoor flying insect fogger* or indoor insect spray* to kill mosquitoes and treat areas where they rest. These products work immediately, but may need to be reapplied. Always follow label directions. Only using insecticide will not keep your home free of mosquitoes.
 - Mosquitoes rest in dark, humid places like under the sink, in closets, under furniture, or in the laundry room.
 - Use an indoor fogger or indoor insect spray to reach and treat areas where mosquitoes rest inside the home.

References:

<http://www.cdc.gov/zika/transmission/index.html>

<http://www.cdc.gov/zika/about/index.html>

<http://www.cdc.gov/zika/prevention/index.html>

<http://www.cdc.gov/zika/prevention/controlling-mosquitoes-at-home.html>

Geographic ranges for *A. aegypti* and *A. albopictus* - A cautionary note about reading distribution maps

When looking at maps indicating geographic ranges for *A. aegypti* and *A. albopictus* and/or Zika virus be careful to understand exactly what the map is showing. There is more than one way of showing geographic ranges for different distributions of mosquitoes and/or disease. Some maps show where mosquitoes actually carrying the Zika virus are found. Other maps show where Zika virus disease is found. Some maps show locations where mosquitoes that could carry the virus are found. Yet other maps show estimates of the potential ranges for *A. aegypti* and *A. albopictus*.

For example, the CDC maps (See: <https://www.cdc.gov/zika/pdfs/zika-mosquito-maps.pdf>) show a best estimate of where climate conditions might allow *A. aegypti* or *A. albopictus* mosquito populations to exist. Such maps are not meant to indicate a current risk for spread of disease. Different maps (See: Hahn, et al., 2016) show areas where, over a period of years, mosquito surveillance programs have found *A. aegypti* and/or *A. albopictus*. This type of map provides more accurate information about mosquitoes actually present in any given region of the United States.

References:

CDC-Zika Mosquito Maps: <https://www.cdc.gov/zika/pdfs/zika-mosquito-maps.pdf>

CDC:<http://www.cdc.gov/zika/vector/>

CDC: All Countries & Territories with Active Zika Virus Transmission:

<http://www.cdc.gov/zika/geo/active-countries.html>

Hahn, M.B., Eisen, R.J., Eisen, L., Boegler, K.A., Moore, C.G., McAllister, J., Savage, H.M., Mutebi, JP. Reported Distribution of *Aedes* (*Stegomyia*) *aegypti* and *Aedes* (*Stegomyia*) *albopictus* in the United States, 1995-2016 (Diptera: Culicidae), *Journal of Medical Entomology*.

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<http://jme.oxfordjournals.org/content/early/2016/06/07/jme.tjw072>

NYS DOH: https://www.health.ny.gov/diseases/zika_virus/docs/

2016-

03-31_testing_for_healthcare_providers_webinar.pdf

Fact Sheets and Additional Information

NYS Zika Information Line - 1-888-364-4723 - Monday – Friday (9 a.m. to 5 p.m.)

From New York State Department of Health (multiple language translations may be available):

Frequently Asked Questions: https://www.health.ny.gov/diseases/zika_virus/faq.htm

Guidance-Using Mosquito Dunks: <https://www.health.ny.gov/publications/13035.pdf>

Information on Zika testing (outside of NYC):

<https://www.health.ny.gov/publications/13026.pdf>

Mosquitos and Disease: <https://www.health.ny.gov/publications/2731/>

NYS DOH Statewide Mosquito-Borne Disease Activity Report: https://www.health.ny.gov/diseases/west_nile_virus/docs/weekly_arboviral_surveillance_report.pdf dis-

NYS Zika Action Plan <https://www.ny.gov/programs/6-step-new-york-state-zika-action-plan>

Zika Virus -Update for Healthcare Providers of Pregnant Women and Women of Reproductive Age in

New York State: https://www.health.ny.gov/diseases/zika_virus/docs/2016-03-31_testing_for_healthcare_providers_webinar.pdf

From CDC (multiple language translations may be available):

CDC-Zika Virus Home Page: <http://www.cdc.gov/zika/index.html>

CDC-Zika Basics: <http://www.cdc.gov/zika/pdfs/fs-zika-basics.pdf>

CDC-Ideas For Talking to Kids About Zika: <http://www.cdc.gov/zika/pdfs/zika-ttykids.pdf>

CDC-Zika/What Can Be Done: <http://www.cdc.gov/zika/pdfs/zika-whatcanbedone.pdf>

CDC-Areas with Zika: http://www.cdc.gov/zika/pdfs/preg_areaswithzika.pdf

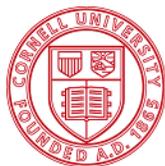
CDC-Protect Your Pregnancy: <http://www.cdc.gov/zika/pdfs/protect-your-pregnancy.pdf>

CDC-Mosquito Life Cycle: <http://www.cdc.gov/zika/pdfs/mosquitolifecycle.pdf>

CDC-Mosquito Maps: <http://www.cdc.gov/zika/pdfs/zika-mosquito-maps.pdf>

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Cornell University
Cooperative Extension
Albany County

P.O. Box 497, 24 Martin Road, Voorheesville, NY 12186

518-765-3500 • FAX 518-765-2490 • www.ccealbany.com • www.facebook.com/ccealbany

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