

Mosquito-borne Diseases

Viruses that are carried by mosquitoes are called **arboviruses**. In Georgia, West Nile virus (**WNV**) appeared for the first time in the 2001 and has continued to be a problem. The Georgia Division of Public Health has been coordinating the efforts of public health professionals, health care providers, veterinarians, and wildlife biologists to help in reducing human risk for this virus.

- The most common way for humans to get an arbovirus is from the bite of an infected mosquito.
- Human arbovirus infections are **rare**. However, a few people may be infected with an arbovirus in Georgia each year.
- Most arboviral infections are mild or have no symptoms at all. In rare cases, an arboviral infection can cause **encephalitis**, which is a swelling of the brain. Symptoms may include a slight fever and/or headache. Severe cases may progress to confusion, coma, and possibly death. Contact your healthcare provider if you have these serious symptoms.
- There is no human vaccine to prevent arboviral infections and there is no specific cure for encephalitis caused by an arbovirus.

However, you can do several things to reduce the chances of getting an arbovirus...

West Nile virus (WNV) is usually a disease of birds that is spread by mosquitoes. At times WNV may infect humans or other types of animals. **Symptoms of WNV in humans are usually mild** and may include fever, headache, swollen glands, and/or a rash. Encephalitis and death occur rarely. WNV is most serious in people who are over 50 years old.

Eastern equine encephalitis (EEE) is a bird disease. Occasionally the disease can be transmitted to horses or humans by mosquitoes that previously fed on infected birds. **EEE is a very rare disease, but it is more severe than WNV** and approximately half of EEE cases are fatal. Young children and elderly people are most susceptible to the disease. The disease usually occurs in late summer or early fall.

LaCrosse encephalitis (LAC) is a disease that is associated with small mammals such as squirrels, chipmunks, rabbits, and mice. In Georgia the disease is found in the northwestern part of the state. **LAC is usually a very mild disease with fever, headache, nausea, and/or vomiting. Severe illness or death is rare.** Young children seem to be most susceptible to LAC.

St. Louis encephalitis (SLE) is also a bird disease that is sometimes transmitted to humans by infected mosquitoes. SLE is spread by a mosquito that lives in urban areas, so the disease usually occurs in urban areas and tends to cause outbreaks rather than isolated cases.

Symptoms of SLE are usually mild, but severe cases can cause encephalitis and/or death. SLE tends to be most severe in infants and in adults over 50 years of age.

West Nile virus (WNV)

...how to protect yourself and your family



You can obtain more information by accessing the public health website at <http://health.state.ga.us>. Call your county health department for more information about mosquito control in your area.

Mosquitoes:

- Are flying insects that feed on human and animal blood.
- Only female mosquitoes bite to get a blood meal to produce her eggs.
- Not all kinds of mosquitoes bite humans.
- Mosquitoes are **pests**, but they can also **transmit diseases** that make humans or animals sick.

Don't get mosquito bites!!

You don't have to stop participating in outdoor activities, but you can reduce your risk of being bitten by mosquitoes if you:

- Reduce your time spent outdoors when mosquitoes are most active.
- Wear pants, long sleeves, shoes, and socks when you are outdoors while mosquitoes are active.
- Consider using a mosquito repellent that contains DEET on exposed skin. For children use products that contain 10% or less DEET. For adults use products that contain no more than 30% DEET. Consult a physician before using DEET on infants or pregnant women. Carefully read and follow directions on the container and wash treated skin when mosquito exposure has ended.
- Make sure your home and porch have tight-fitting screens that keep mosquitoes out.

Don't allow mosquitoes to breed near your home.

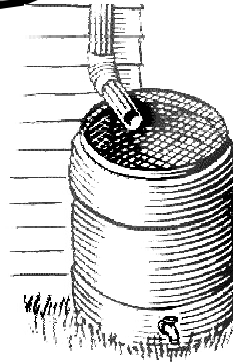
Most mosquito species don't fly very far and all mosquitoes need water to breed. It doesn't take much water and it doesn't take much time. **Almost anything that will hold water for one week can produce these pests.** Many places around your home may be causing mosquito problems. Don't give mosquitoes a chance. Eliminate all standing water from your property.



☞ Properly throw away or destroy old tires.

☞ Dispose of tin cans, jars, plant pots, and any other containers that can hold water.

☞ Make sure roof gutters drain properly. Clean clogged gutters in the spring and fall.



☞ Store wheelbarrows, tubs, buckets, barrels, and boats upside down so that water cannot accumulate in them.

☞ Screen or cover rain barrels.

☞ Change the water in bird baths, small wading pools, and pet dishes at least once a week. Aerate ornamental ponds or stock them with fish.

☞ Properly chlorinate backyard swimming pools. Cover any pool that is not in use so rainwater and leaves do not accumulate in it. Be sure the cover does not hold pockets of water.

The use of pesticides to control **adult** mosquito populations (called "adulticiding") is NOT the most effective or the most cost-efficient method of mosquito control. Think about how difficult it would be to kill every single mosquito, especially when some mosquitoes are active during the day, some are active at dusk, and still others are active at night. **The best way to control mosquitoes is to prevent them from breeding or to eliminate them before they become adults** (called "larviciding"). Because the mosquitoes that transmit diseases typically like to breed in human-made containers, you can have a significant affect on local mosquito populations if you reduce mosquito breeding areas on your property. If some areas of standing water still exist, you might consider using a larvicidal product that is available at some hardware stores. Mosquito control varies greatly across Georgia and is partly dependent upon local mosquito populations and habitats.