



Mosquito-borne Disease in Florida



What is an arbovirus?

Arboviruses are viruses spread to people by insect or tick bites. In Florida, we find West Nile virus (WNV), Eastern Equine Encephalitis virus (EEEV), and St. Louis Encephalitis virus (SLEV). These viruses are spread by mosquitoes and can cause serious illnesses in people.

How do people become infected with arboviruses?

An infected mosquito spreads virus through its bite. The virus mainly passes back and forth between birds and mosquitoes. Sometimes an infected mosquito will bite a person or a horse instead of a bird. People cannot catch an arbovirus from casual contact with an infected person.

What are the symptoms of arboviral illness?

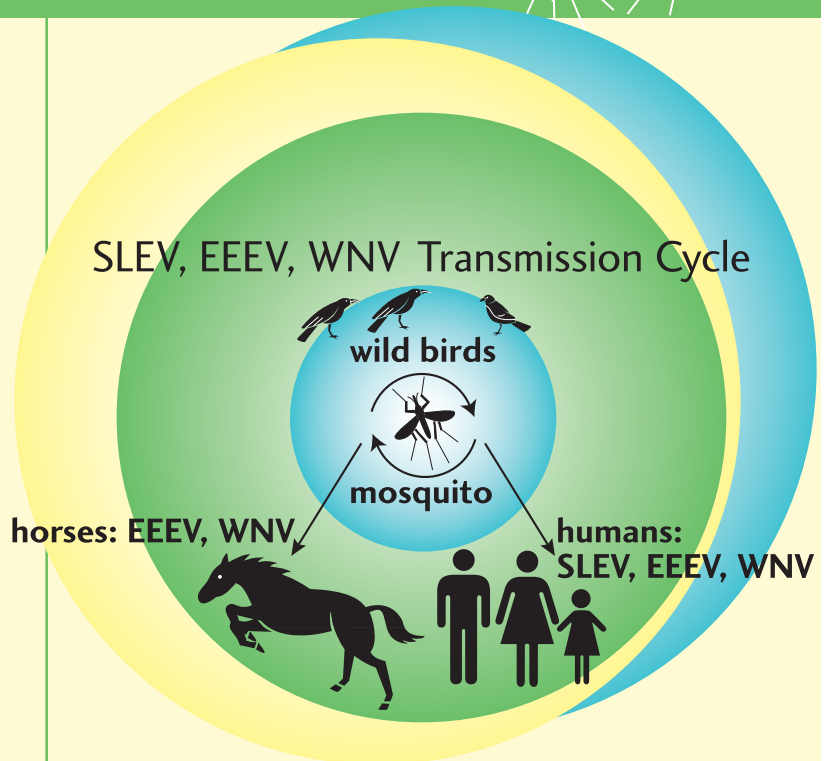
Most people infected with an arbovirus do not even get sick. For the small number who do become ill, it can take two to 15 days after the bite of an infected mosquito before they become sick. Symptoms may include fever, headache, tiredness, dizziness, and confusion. WNV may also cause a rash or muscle weakness. People 50 years old and older are more likely to have brain swelling from SLEV or WNV infections. Anyone infected with EEEV may develop brain swelling. Someone with fever and a bad or strange headache should see a doctor as soon as possible. The doctor may order laboratory testing to see if an arbovirus caused the illness. Although there is no cure for arboviruses, there is treatment for the symptoms. Treatment is important. A person with severe brain swelling might go into a coma or die.

What do we do to limit the spread of mosquito-borne illness?

Animals and mosquitoes are watched closely for signs of arbovirus. Chicken flocks called sentinel chickens are kept in many counties. Blood from the chickens is tested to look for signs of arboviruses. If virus is found and mosquitoes are biting, mosquito control efforts will increase. Press releases and public education will remind people to protect themselves from mosquito bites.

What about other animals?

Horses can also become ill from EEEV and WNV. Sick horses are sometimes the first sign that an arbovirus is in an area. Dead birds are another clue that WNV may be circulating. Please report dead birds on the internet site www.myfwc.com/bird/. If you do not have a computer, call your county health department or local Fish and Wildlife Conservation Commission office. Avoid handling sick or dead animals with bare hands.



Are arboviral illnesses common in Florida?

WNV was first found in Florida in 2001. Over the years, SLEV has been the most common cause of arboviral disease in Florida. More than 200 people have gotten seriously ill during outbreaks of WNV and SLEV disease. Such outbreaks do not occur every year. Usually, no more than five people a year are found with EEEV disease in Florida.

What can I do to protect my family and myself from mosquito-borne disease?

At this time, the best way to reduce the risk of getting ill is to avoid getting mosquito bites by practicing the 5 D's of Prevention.

THE 5 D'S OF PREVENTION

- **Avoid being outside during DUSK and DAWN** when mosquitoes are most active.
- **To protect against bites, DRESS** so that your skin is covered with clothing. Wear shoes, socks, long pants and a long-sleeved shirt.
- **DRAIN** stagnant water so that mosquito wrigglers cannot grow up to become biters.
- **Wear insect repellent containing DEET*** (N,N-diethyl-meta-toluamide or N,N-diethyl-3-methylbenzamide). You can add to your protection by applying a permethrin repellent directly to your clothing. Picaridin and oil of lemon eucalyptus are other repellent options. Always read the manufacturer's directions carefully before using a repellent, and make sure the repellent is age-appropriate.

For more information, visit our website at www.MyFloridaEH.com/community/arboviral/index.html.

You may also call 850-245-4299 during office hours, or call 1-888-880-5782 for recorded information at any time. To report pesticide-related illness or injury, call 1-800-606-5810.





Mosquito-Proofing Your Home



The best way to prevent mosquito-borne disease is to avoid mosquito bites. By following the mosquito hygiene checklist and the 5 D's of prevention, you can help protect yourself and your family from mosquito-borne disease.

Rid the wrigglers—lose the larvae

Mosquitoes lay their eggs where there is moisture. It takes only a few days for an egg to grow into an adult mosquito, which can live for several weeks. During that time, an adult female mosquito can lay many eggs. In order to produce eggs, the adult female seeks a host (such as a bird, a horse, or a human) to provide a blood meal. An adult mosquito can fly about two miles from its breeding site (even further if blown by the wind). Elimination of mosquito breeding sites is one of the keys to prevention.

- Remove standing water in old tires, buckets, drums or any other containers.
- Clean out gutters. Check flat roofs that may have poor drainage.
- Cover barrels and trash containers tightly with a lid or with a fine mesh screening material.
- Empty plastic wading pools at least once a week. Store them indoors when not in use.
- Change the water in bird baths and pets' water bowls at least once a week.
- Empty the water in plant pots at least once a week.
- Turn over or remove empty plastic pots.
- Remove old tires or drill holes in those used in playgrounds to drain.
- Level the ground around your home so water can run off.
- Fill in holes or depressions near your home that collect water.
- Pick up all beverage containers and cups.
- Store boats covered or upside down.
- Check tarps on boats or other equipment that may collect water.
- Pump out bilges on boats.
- Treat standing water with products that kill mosquito larvae. These are available at home improvement stores and garden centers.
- Fill in tree holes and hollow stumps that hold water.
- Stock your water garden with mosquito-eating fish like minnows, gambusia, goldfish or guppies.
- Remove vegetation or blockages in drainage ditches so that water can flow through.
- Repair screening on windows, doors, porches and patios.

A word about “Zappers”

Some gadgets intended to work as mosquito control methods do not do a very good job. For example, “bug zappers” do not work well to control biting mosquitoes. They may actually attract more mosquitoes into your yard, and they kill beneficial insects as well. Various birds and bats will eat mosquitoes, but there is little evidence that this cuts down on the number of mosquitoes around homes. Electronic mosquito devices don't stop mosquitoes from biting people either.

The 5 D's of Mosquito-borne Disease Prevention

Do not go outdoors at **DUSK AND DAWN** when mosquitoes are most active.

If you must be outdoors when mosquitoes are active, **DRESS SO THAT YOUR SKIN IS MOSTLY COVERED.**

Empty containers and **DRAIN STANDING WATER** around your home.

Use a mosquito repellent containing **DEET (N,N-diethyl-meta-toluamide or N,N-diethyl-3-methylbenzamide)**. Picaridin and oil of lemon eucalyptus are other approved repellent options.

*DEET is not recommended for children younger than two months old. Also, repellents containing oil of lemon eucalyptus should not be used on children under the age of 3 years. Avoid exposing your baby to mosquitoes. If you have to take your baby outside, dress him or her in protective clothing and cover the stroller with mosquito netting.

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