



State and county agencies watch animal and mosquito populations closely for arboviruses. Mosquito control activities are increased when virus is found and mosquito populations are large. More press releases and public education activities are done to remind people to protect themselves against mosquito bites. To see the latest press releases, select “Diseases and Conditions,” then “Arboviral Encephalitis,” and then “Press Releases” on the Department of Health’s website at www.doh.state.fl.us.

Dead birds may be an indicator that WN is in your area. Please report dead birds on the internet site www.wildflorida.org/bird/ or call your county health department or local Fish and Wildlife Conservation Commission office.



For more information call:

For any questions about pesticides, call Pesticide Surveillance at **1-800-606-5810**.



Florida Department of Health

Bureau of Community Environmental Health

<http://www.doh.state.fl.us/Environment/hsee/arbo/index.htm>

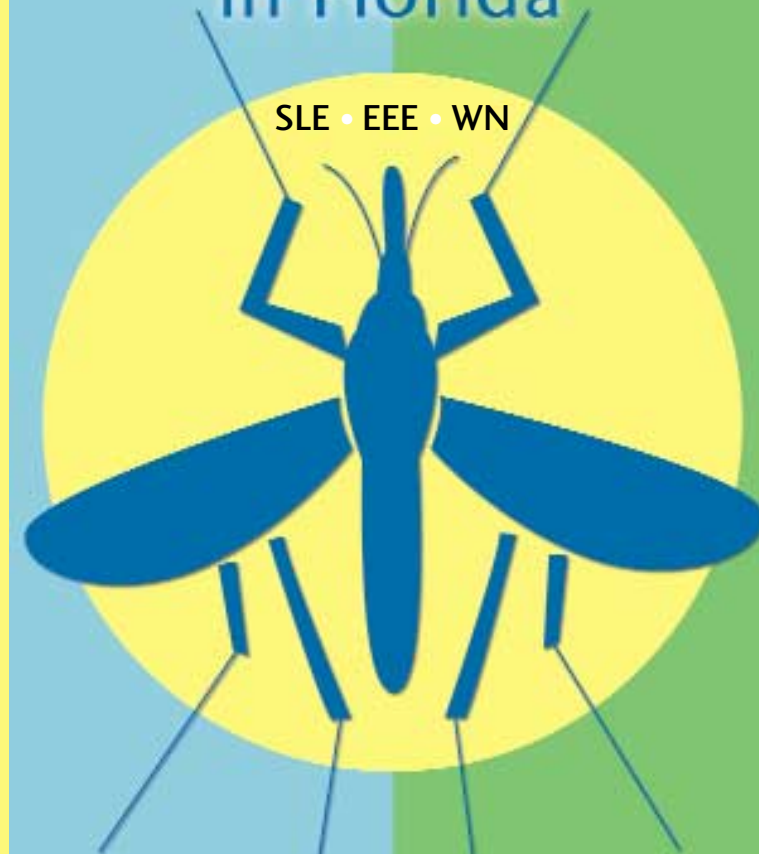
(850) 245-4299

DH 150-753, 8/03<None>



Mosquito-borne Disease in Florida

SLE • EEE • WN



Florida Department of Health

... do you know the **5D's** of prevention? ...

A virus is a very small germ.



Viruses that are carried by mosquitoes are called arboviruses. Many arboviruses cause encephalitis, a swelling of the brain. St. Louis encephalitis (SLE) virus is the most common cause of encephalitis in Florida. During most years, one to 10 people are found to have the SLE virus. During the last 30 years, several large outbreaks with as many as 200 cases have occurred in the state. Other arboviruses that cause encephalitis in Florida are eastern equine encephalitis (EEE) virus and West Nile (WN) virus. Usually no more than five people in Florida are found to have EEE each year. WN virus was first identified in Florida during 2001. Twelve people were found to have WN virus encephalitis during 2001, and 28 were found in 2002.

Symptoms

Many people infected with an arbovirus may not even get sick. For the small number who do become ill, it may take from two to 15 days after the bite of an infected mosquito before they become sick. Symptoms may include high fever, headache, fatigue, dizziness, weakness and confusion. WN may also cause rash or muscle weakness. People 50 and older are more likely to develop brain swelling from SLE or WN virus infections. Anyone infected with EEE virus may develop brain swelling. People with fever and a bad or strange headache should see a doctor as soon as possible. The doctor may need to order laboratory testing to see if an arbovirus caused the illness. Although there is no cure for arboviruses, symptoms can be treated. Treatment is important. People with a severe arbovirus illness might go into a coma or die because of brain swelling.

Prevention is the key

At this time, there are no vaccines available to protect people from arboviruses. The best way to reduce the risk of getting ill is to avoid getting mosquito bites.

If you must be outdoors when mosquitoes are active, cover up. Wear shoes, socks, long pants and a long-sleeved shirt.

Use a mosquito repellent. You get the best protection by using repellents containing DEET: N,N-diethyl-meta-toluamide, or N,N-diethyl-3-methylbenzamide. The more DEET a repellent contains the longer time it gives protection from mosquito bites. Repellents with greater than 30 percent DEET do not give you more protection and may increase your chances of suffering side effects. You can add to your protection by applying a permethrin repellent directly to your clothing. Always read the manufacturer's directions carefully before you put on repellent.

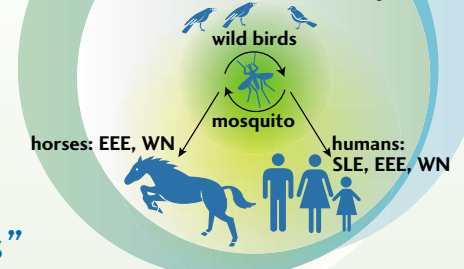
It is important to remember that DEET is not recommended for children younger than two months old. Instead, avoid exposing your baby to mosquitoes. If you have to take your baby outside, dress him or her in protective clothing and cover the stroller with mosquito netting.

Rid the wrigglers—lose the larvae

Practice good “mosquito hygiene” around your home.

- Remove standing water in old tires, buckets, drums or any other containers.
- Check clogged gutters and flat roofs that may have poor drainage.
- Cover barrels and trash containers tightly with a lid or with 16-mesh screen.
- Empty plastic wading pools at least once a week. Store them indoors when not in use.
- Change the water in bird baths, pets' water bowls and plant pots or drip trays at least once each week.
- Store boats covered or upside down.
- Level the ground around your home so water can run off.
- Fill in holes or depressions near your home that collect water.
- Treat standing water with products containing the bacteria *Bacillus thuringiensis*, var. *israelensis*.
- Fill in tree holes and hollow stumps that hold water.
- Stock your ornamental water garden with mosquito-eating fish (e.g., minnows, gambusia, goldfish or guppies).
- Repair screening on windows, doors, porches and patios.

SLE, EEE, WN Virus Transmission Cycle



“Zappers”

Some mosquito control methods do not do a very good job. For example, bug “zappers” do not work well to control biting mosquitoes. 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 repellers don't stop mosquitoes from biting people either.

Transmission and Surveillance

SLE, EEE and WN viruses pass back and forth between birds and mosquitoes. State and local agencies keep a close watch on mosquito populations. In many areas, mosquito control agencies and county health departments also keep chicken flocks, called sentinel chickens. The blood of these chickens is sampled for signs of arboviruses. Chickens make good sentinels because they do not get sick from arboviruses. People cannot catch an arbovirus from the chickens.

Horses can get encephalitis from the EEE and WN virus. Sick horses are often the first indicator that an arbovirus is in an area.

Yet another sign of the presence of WN virus are dead birds. Please report dead birds on the internet site www.wildflorida.org/bird/ or call your county health department or local Fish and Wildlife Conservation Commission office.



Don't go outdoors at **Dusk & Dawn** when mosquitoes are most active

To protect against bites, **Dress** so your skin is covered with clothing

Protect bare skin and clothing with a **DEET** mosquito repellent

Empty containers and **Drain** stagnant water so mosquito wrigglers can't grow up to become biters