Note: This document has been approved by FDOH central office for use by county PIOs during a public health incident. Please be sure to add appropriate letterhead before distributing.

# UPDATED: 08/2015

**Frequently Asked Questions: St. Louis Encephalitis**

# What is St. Louis Encephalitis?

St. Louis Encephalitis is a rare disease that is spread to horses and humans by infected mosquitoes. St. Louis encephalitis virus (SLEV) is one of a group of mosquito-transmitted viruses that can cause inflammation of the brain (encephalitis). Historically, Florida has from one to 10 cases of SLEV infection in an average year. Several large outbreaks involving as many as 200 cases have occurred in Florida in recent decades. Florida had two reported cases of SLE in 2014, representing the first human cases since 2003.

# What is the infectious agent that causes St. Louis Encephalitis?

St. Louis Encephalitis is an arbovirus. Arbovirus is short for arthropod-borne virus. Arboviruses are a large group of viruses that are spread by certain invertebrate animals (arthropods), most commonly blood-sucking insects. In the United States, arboviruses are spread mainly by infected mosquitoes. Birds are the source of infection for mosquitoes, which can sometimes transmit the infection to people. The virus is very similar to West Nile virus and belongs in the same family.

**How Does St. Louis Encephalitis Spread?**

Most often, SLEV is spread by the bite of an infected mosquito. Mosquitoes become infected when they feed on infected birds. Infected mosquitoes can then spread SLEV to humans when they bite. SLEV is not spread through casual contact such as touching or kissing a person with the virus.

# What are the signs and symptoms of St. Louis Encephalitis?

Most people who are infected with SLEV have no symptoms or only mild non-specific flu-like illness. However, in some individuals, especially the elderly, SLEV can cause serious illness that affects the central nervous system. Symptoms often include fever, headache, stiff neck, disorientation, and altered level of consciousness. Coma, convulsions, and paralysis may also occur.

# How soon after exposure do symptoms appear?

Symptoms usually appear five to 15 days after the bite of an infected mosquito.

# How is St. Louis Encephalitis diagnosed?

Diagnosis is based on tests of blood or spinal fluid. These tests typically look for antibodies that the body makes against the viral infection.

# Who is at risk for infection with SLEV?

Anyone can get St. Louis Encephalitis, but some people are at increased risk due to bites of infected mosquitoes:

* People living in or visiting areas where the disease is common.
* People who work outside or participate in outdoor recreational activities in areas where the disease is common.
* Elderly persons are at increased risk of severe disease if they are infected

##### **What parts of the State of Florida are most at risk?**

Historically, SLEV has been detected throughout the state although outbreaks have tended to occur more in Central Florida from coast to coast.

# What is the treatment for St. Louis Encephalitis?

There is no specific treatment for St. Louis Encephalitis. Antibiotics are not effective against viruses, and no effective anti-viral drugs have been discovered. Patient care centers on treatment of symptoms and complications.

# How can St. Louis Encephalitis be prevented?

The best defense against these viruses is prevention. The best preventive measure for residents living in areas infested with mosquitoes is to eliminate the places where the mosquito lays her eggs, primarily artificial containers that hold water.

To prevent mosquitoes from living and multiplying around your home or business:

**DRAIN** standing water:

* Drain water from garbage cans, buckets, pool covers, coolers, toys, flowerpots or any other containers where sprinkler or rainwater has collected.
* Discarded old tires, drums, bottles, cans, pots and pans, broken appliances and other items that aren't being used.
* Empty and clean birdbaths and pet's water bowls at least once or twice a week.
* Protect boats and vehicles from rain with tarps that don’t accumulate water.
* Maintain swimming pools in good condition and appropriately chlorinated. Empty plastic swimming pools when not in use.

**COVER** your skin with:

* CLOTHING - If you must be outside when mosquitoes are active, cover up. Wear shoes, socks, long pants and long sleeves.
* REPELLENT - Apply mosquito repellent to bare skin and clothing. Always use repellents according to the label. Repellents with 10-30 percent DEET, Picaridin, oil of lemon eucalyptus, para-menthane diol, and IR3535 are effective.
* Use mosquito netting to protect children younger than 2 months old.

**COVER** doors and windows with screens:

* Keep mosquitoes out of your house. Repair broken screening on windows, doors, porches, and patios.

For additional information visit

[www.floridahealth.gov/diseases-and-conditions/st-louis-encephalitis/index.html](http://www.floridahealth.gov/diseases-and-conditions/st-louis-encephalitis/index.html).

For information from the Centers for Disease Control and Prevention (CDC) visit [www.cdc.gov/sle/index.html](https://www.cdc.gov/sle/index.html)