

Fact sheet

St. Louis encephalitis

What is St. Louis encephalitis?

St. Louis encephalitis virus is spread to people by the bite of an infected mosquito. St. Louis encephalitis infections generally occur during warm weather months when mosquitoes are most active.

How is St. Louis encephalitis spread?

The virus that causes St. Louis encephalitis circulates in the environment between the *Culex* species of mosquito and birds. Occasionally, migrating birds carry the virus from one area of the country to another. Humans become infected after a mosquito feeds on an infected bird and then bites them. Humans do not pass the virus on to other biting mosquitoes and cannot pass it from person to person.

What are the signs and symptoms of St. Louis encephalitis?

Only 1 out of 300 people who are infected will have any symptoms. Mild symptoms include a slight fever and/or headache. Severe infections are rare and are marked by a sudden headache, high fever, disorientation, coma, tremors, convulsions, and/or paralysis. Death occurs in about 5–20% of people who have symptoms. The elderly are at highest risk of severe outcomes.

How long after infection do symptoms appear?

Symptoms usually occur 4 to 21 days after someone is bitten by an infected mosquito.

Who is most at risk?

Anyone can get infected with St. Louis encephalitis, but the elderly, and people with weakened immune systems, or medical conditions such as cancer, hypertension, diabetes, and kidney disease are at greater risk for serious illness.

How is St. Louis encephalitis diagnosed?

Diagnosis is based on a combination of clinical signs and symptoms and laboratory blood tests. A healthcare provider can order these tests to look for St. Louis encephalitis virus infection and other infections that cause similar symptoms.

How is St. Louis encephalitis treated?

There is no specific treatment for St. Louis encephalitis. Over-the-counter medication can be used to reduce fever and relieve some symptoms.

People who have mild symptoms typically recover on their own, although some symptoms may last for several weeks. In more severe cases, patients often need to be hospitalized to receive supportive care such as intravenous fluids, pain medication, and nursing care.

How can St. Louis encephalitis be prevented?

- Use insect repellents when outdoors. Look for EPA-registered insect repellents that contain DEET, picaridin, IR3535, oil of lemon eucalyptus, 2-undecanone, or para-menthane-diol to provide longer-lasting protection. Follow the directions on the package and pay special attention to recommendations for use on children.
- When outdoors, wear loose-fitting long sleeves and pants from dusk through dawn when Culex mosquitoes are most active. Consider treating your clothes with permethrin.

- Install or repair screens on windows and doors. Use air conditioning if you have it.
- Empty standing water from containers, such as flower pots, gutters, buckets, pool covers, pet water, dishes, discarded tires, and bird baths to reduce the number of mosquitoes around your home.

Where can I get more information?

- Your personal healthcare provider
- Your [local health department](#)
- [Utah Department of Health and Human Services](#)
- [Centers for Disease Control and Prevention \(CDC\)](#)