

LaCrosse Encephalitis

What is LaCrosse Encephalitis?

LaCrosse encephalitis is a viral illness that is transmitted to people through the bite of an infected mosquito.

How serious is LaCrosse Encephalitis?

Most people infected with this virus will have either no symptoms, or a mild flu-like illness. A small percentage of people (especially children) may develop encephalitis (inflammation of the brain). Approximately 1-3% of these encephalitis cases are fatal, and another 15% of patients have long-term nervous system problems.

Most of the severe cases start with headache, fever, nausea, and lethargy. The illness may rapidly progress into disorientation, seizures, and coma. There is no treatment for the illness other than supportive care until the illness is over.

Who is at risk for LaCrosse Encephalitis?

Severe cases occur primarily in children (average case age is six years old).

In Minnesota, cases of LaCrosse encephalitis have been found in 19 southeastern counties from the Twin Cities to the Iowa border. Three to 13 cases are reported each year in Minnesota.

Most people are exposed to infected mosquitoes in wooded habitat, as the mosquito that transmits the virus is found in hardwood forests.

What kind of mosquito transmits LaCrosse Encephalitis?

In Minnesota we have approximately 50 species of mosquitoes. Not all mosquitoes feed on people, and the primary vector of LaCrosse encephalitis is the Eastern Tree Hole mosquito (*Ochlerotatus triseriatus*).

The Tree Hole mosquito is found almost exclusively in wooded or shaded areas, and usually does not fly more than 200 yards from the area where it was produced. It feeds during the day, unlike many of our pest mosquitoes that feed mostly at dusk and dawn.

Tree Hole mosquitoes reproduce in water-holding tree holes (pockets of rainwater that collect between the main trunks of trees with two or more trunks). They also reproduce in waste tires, buckets, cans, and any other container that can hold rainwater.

The female Tree Hole mosquito can pass LaCrosse encephalitis virus into her eggs. In this way, the virus is maintained in the same areas year after year. If large numbers of water-holding containers are present in an area where LaCrosse virus is also present, there may be significant numbers of infected mosquitoes by late summer. The highest risk of LaCrosse encephalitis is typically from mid-July through early September.



Infectious Disease Epidemiology,
Prevention & Control
717 Delaware St. SE
Minneapolis, MN 55440
(612) 676-5414
www.health.state.mn.us

LaCrosse Encephalitis -page 2

What can people do to prevent LaCrosse Encephalitis?

The best way to prevent LaCrosse encephalitis is to remove water-holding containers from your property. It is easier to do this in the spring before growing vegetation obscures the containers.

Birdbaths should have their water changed every week to prevent mosquito breeding, and gutters should be checked to make sure they are not plugged.

Water-holding tree holes should be filled with dirt, sand, or a pliable insulation cement to prevent further mosquito breeding.

If children play in or near wooded areas during the day, they can:

wear long-sleeved shirts and long pants (light-colored clothing works best)

use repellents containing DEET (less than 30% DEET is sufficient for adults, and less than 10% DEET is adequate for children) according to label directions