LaCrosse encephalitis is a mosquito-borne illness. It is a potentially serious disease affecting the brain and central nervous system. Almost all cases occur in children. It is important to remove the potential breeding sites (water-holding tree holes and/or artificial containers) of the mosquitoes that can carry the LaCrosse encephalitis virus. These measures should be taken in wooded or shaded areas where the mosquitoes carrying the virus are commonly found.

Most cases of LaCrosse encephalitis occur in a relatively small area of Minnesota, which includes suburban communities in the Lake Minnetonka area of the Twin Cities and 21 southeastern Minnesota counties including: Anoka, Blue Earth, Brown, Carver, Dakota, Dodge, Fairbault, Fillmore, Goodhue, Hennepin, Houston, Le Sueur, Olmsted, Ramsey, Rice, Scott, Sibley, Wabasha, Washington, Winona, and Wright. The highest risk of LaCrosse encephalitis is typically from mid-July through early September.

CAUSE

A bunyavirus.

SYMPTOMS

May not be apparent or may range from mild headaches and influenza-like symptoms (such as fever, malaise, tiredness, headache, stiff neck, or muscle aches) to mental confusion and convulsions. Severe cases may develop inflammation of the brain (encephalitis).

SPREAD

LaCrosse encephalitis virus is spread through the bite of an infected mosquito. *Ochlerotatus triseriatus*, also known as the Eastern Tree Hole mosquito, will breed in any small container where water and debris can collect. Most people who get LaCrosse encephalitis are exposed to the illness close to where they live, because the Tree Hole mosquito does not travel very far—its normal range is no more than half a mile.

Female Tree Hole mosquitoes can pass the LaCrosse encephalitis virus on to their offspring through their eggs. These eggs survive the winter and allow the virus to remain in the same areas year after year.

INCUBATION

It takes 5 to 15 days from the time the person is exposed/bitten until the symptoms begin.

CONTAGIOUS PERIOD

None. It is not spread from person-to-person.

EXCLUSION

Childcare and School: None.

DIAGNOSIS

Recommend parents/guardians call their healthcare provider if symptoms of LaCrosse encephalitis are present. A healthcare provider must make the diagnosis.

TREATMENT

Recommend parents/guardians call their healthcare provider.
PREVENTION/CONTROL

- Eliminate potential breeding sites. The mosquito breeds in water in tree holes and artificial containers, especially those in wooded or shady areas. Natural features, like holes or pockets in trees that collect water (especially where two trunks of a tree meet at the base) should be manually drained each time they collect rainwater, or they should be modified so water cannot collect in them by filling with dirt or sand or filling with rock wool (insulating cement). Check often to ensure that water does not collect.

A variety of “artificial” items – old tires, buckets, birdbaths, cans, children’s toys, wading pools, tire swings, or anything else that will hold a small pool of water should be emptied or discarded. Old tires should be sent to a local recycling center for proper disposal. Gas stations or tire stores may also be potential drop-off sites.

- Wear protective clothing, such as long-sleeved shirts and pants, when outdoors during daytime hours. (Note: This mosquito is a daytime feeder - they’re typically done feeding before dusk.)

- Use an insect repellent with DEET (the active ingredient in most insect repellents). Repellents containing DEET (up to 30% concentration for both adults and children; do not use DEET on infants younger than 2 months of age) may be used on clothing or skin. **ALWAYS FOLLOW THE LABEL DIRECTIONS.** If used properly, most repellents are very safe.

It is most important to apply the insect repellent before going into shaded or wooded areas during the day.

FOR MORE INFORMATION

Kentucky Department for Public Health Frankfort, KY  http://chfs.ky.gov/dph/
Kentucky Regional Poison Center Louisville, KY  EMERGENCY: 1-800-222-1222
Lake Cumberland District Health Department Somerset KY  www.lcdhd.org  (606) 678-4761
The Centers for Disease Control and Prevention (CDC) Atlanta, GA  Toll free: 1-800-311-3435  www.cdc.gov