Mosquito Borne Illnesses

In Minnesota there are approximately 50 species of mosquitoes. LaCrosse Encephalitis (LCE) and West Nile viruses (WNV) are two regional viruses that can be transmitted by mosquitoes. Both viruses can result in Arboviral Encephalitis which means insect-borne encephalitis. Encephalitis is an inflammation of the brain.

Most viral infections are mild with mild flu like symptoms such as fever, headache and body aches. Symptoms of severe infections may include fever, headache, neck stiffness, lethargy, and may progress rapidly into disorientation, convulsions, coma and death. There is no treatment for encephalitis other than supportive care until the illness is over.

How can I get LaCrosse Encephalitis? The Eastern Tree Hole mosquito is the primary transmitter of LCE and lives almost exclusively in wooded/shaded areas. They reproduce in small pockets of water such as tree holes, buckets, cans, and waste tires. They usually do not fly more than 200 yards from the area they were reproduced and feed during the day.

The highest risk of LCE is typically mid-July through early September

How can I minimize my risk of LCE? To reduce their breeding ground you should: remove water holding containers from property, water in bird baths should be changed every week, gutters kept unplugged and water holding tree holes should be filled.

How can I get West Nile virus? Mosquitoes become infected with the virus when they feed on infected birds. Infected mosquitoes can then transmit the virus to humans and animal they bite. WNV is not limited to a specific species of mosquito. The highest risk in temperate climates is between late summer and early fall, as is the case for LCE.

When did West Nile virus come to the U.S.? The first documented case of WNV occurred in New York State in 1999. This virus is commonly found in Africa, West Asia and the Middle East.

How can I minimize my risk of WNV? Stay indoors at dawn, dusk and evening when most mosquitoes feed.

To minimize the risk of being bit by mosquitoes the CDC and MDH recommend:

- Wear long sleeved shirts and pants when you are outdoors.
- Spray clothing with repellents such as DEET since mosquitoes may bite through thin clothes.
- Apply insect repellent sparingly to exposed skin according to label directions. Products containing less than 10% DEET are recommended for children. For adults, products containing up to 30% DEET may be used.
- For in depth information, contact the Minnesota Department of Health.