

# Treeways

2017 -2

## Preventing Mosquito Borne Diseases

Wet years bring hordes of mosquitoes ready to attack us, drink our blood and potentially infect us with devastating diseases. Thankfully our climate does not yet allow malaria or yellow fever or Zika virus to be transmitted by mosquitoes in Minnesota. There are however a couple diseases to be aware of. Both West Nile Encephalitis and LaCrosse Encephalitis are viral illnesses that are transmitted to people via the bite of an infected mosquito.

I know several people from greater Minnesota and Sunfish Lake who have had either had West Nile or LaCrosse Encephalitis and told me about how seriously ill these virus diseases can make you. **These diseases can be career ending, life changing or completely debilitating.** Most people that become infected with either West Nile or Lacrosse encephalitis either have no symptoms or a mild flu-like illness. With LaCrosse encephalitis a small percentage of patients, especially children, develop brain inflammation and of these perhaps 1-3% are fatal and another 15% develop long-term nervous system problems. A small percentage of people who are infected by West Nile virus, especially elderly patients, may develop brain inflammation (encephalitis) and perhaps 10% of these severe cases are fatal. Symptoms typically include headache, fever, nausea, lethargy, stiff neck, and vomiting that may progress into confusion, disorientation, altered reflexes, convulsions, seizures, and coma. **There is no treatment other than supportive care.** The primary vector of LaCrosse encephalitis is the Eastern Tree Hole mosquito, *Ochlerotatus triseriatus*, and West Nile encephalitis may be transmitted by one or more species of mosquito.

Any water-holding items such as waste tires, cans, buckets, beach toys, bird baths, covers, jars, or any other container that can hold rainwater for more than 48 hours can become a mosquito breeding site. The best way to prevent these diseases is to drain, empty and remove any item that can hold stagnant water. The best time to find these mosquito breeding sites is early spring before new vegetation obscures them. Change bird bath water at least weekly, make sure gutters are clear, and fill water-holding tree holes with sand or expanding foam insulation. Wear long-sleeved light colored clothing and use an insect repellent containing DEET. Dawn and dusk are peak feeding times for mosquitoes however the eastern tree-hole mosquito feeds during the day. There are no human vaccines available for either disease at this time. For additional information check online with the Minnesota Department of Health.

Jim Nayes  
Sunfish Lake City Forester  
612-803-9033  
jim@lstrees.com