What is Eastern Equine Encephalitis?
Eastern equine encephalitis (EEE) is transmitted when an infected mosquito bites a human or horse. During the summer of 2001, at least 70 horses in Wisconsin were infected with EEE virus. There were also three confirmed equine cases in Minnesota in 2001 (one each in Anoka County, Blue Earth County, and Kanabec County). The disease is rare in humans but can be life threatening. Three human cases have been reported in Wisconsin over the past 30 years. None have been reported in Minnesota.

What are the symptoms in horses?
In horses, symptoms of EEE can include fever, loss of appetite, drooping eyelids and lower lip, aimless wandering and circling behavior, blindness, and inability to stand. Young horses are most commonly affected. The infection is fatal to horses in more than 90 percent of cases, and death usually occurs within two to three days. Signs are similar to western equine encephalitis, which is documented more often in Minnesota.
Horses can be vaccinated against EEE; and horse owners should consult their veterinarian about getting this done. Outbreaks of EEE often occur several weeks before the illness is documented in humans. People cannot contract EEE directly from horses.

What are the symptoms in humans?
Most EEE infections in humans do not cause any symptoms or illness. When people do develop the illness, symptoms can include high fever, fatigue, aching muscles, a stiff neck, and tremors or confusion. In severe cases, inflammation of the brain (encephalitis) occurs, which may lead to convulsions, coma, and death. Although illness is rare, when it does occur, death rates in children can be greater than 50 percent. Illness survivors may have brain damage and long-term disabilities.

How can EEE be prevented?
There is no human vaccine against this disease; therefore, people should take precautions such as using repellants containing DEET (products containing less than 30 percent DEET are recommended). Outdoor activities should be avoided at dawn or dusk when some mosquitoes are most active. Steps should be taken to eliminate potential mosquito breeding habitat on or around property, paying special attention to natural or man-made places where water can collect and mosquitoes can lay their eggs – old tires, birdbaths, tree holes, and clogged rain gutters.

Additional Information:
- Centers for Disease Control and Prevention
- Minnesota Department of Health

This fact sheet is meant to provide basic information. For specific health concerns please contact your physician or veterinarian. Updated 2005.