Eastern Equine Encephalitis Virus Fact Sheet

Eastern equine encephalitis virus (EEE) is a virus spread through the bite of an infected mosquito that can cause a swelling of the brain (encephalitis).

EEE occurs in the eastern United States from Canada to Florida and all areas east of the Mississippi River. The Centers for Diseases Control and Prevention (CDC) reports about 5 human cases of EEE per year in the United States.

The virus is normally maintained in nature in a bird-mosquito cycle. Disease in humans and other animals is typically rare but can occur when an infected mosquito takes a blood meal. There is no direct human-to-human or horse-to-human spread of EEE.

EEE can infect people of all ages and can be a serious or fatal disease. Although most people who are infected develop no symptoms, up to 30 to 50% of those that develop encephalitis may die. People that recover from EEE can have significant side effects such as seizures, mental retardation and paralysis.

Symptoms of EEE include:

- Fever
- Headache
- Muscle aches
- Vomiting
- Seizures
- Extreme tiredness
- Mental confusion
- Coma

See your health care provider if you have any of these symptoms following a mosquito bite. Symptoms usually occur 4 to 10 days after exposure to a mosquito carrying the virus. There is no specific treatment and there is no vaccine for use in people.

EEE can also cause serious illness in horses, ratites (flightless birds such as ostriches and emus) and pheasants. There is a vaccine available for horses; please contact your veterinarian for further information about vaccinating your horse(s) or ratites.

Mosquito control is very important to decrease the risk of infection with EEE. Steps that you can take to prevent EEE include:

- Wear insect repellents if you will be outside especially during the hours of dusk to dawn when mosquitoes are most active. An effective repellent is one that contains 20 to 30% DEET. Please check with your health care provider before applying DEET to children and infants.
- Wear long sleeves and long pants to avoid mosquito bites.
- Remove standing water around homes and businesses (such as water in buckets, bird baths, old tires etc.).
- Inspect window and door screens and repair any holes found.