

EASTERN EQUINE ENCEPHALITIS

PERSONAL HEALTH FACT SHEET

What is Eastern Equine Encephalitis?

Eastern Equine Encephalitis, or EEE, is a very rare but serious disease caused by a virus that is transmitted to humans, horses and some bird species through mosquito bites. This form of encephalitis occurs mainly along the Eastern seaboard, in the Gulf states, and in the Great Lakes Region.

What is the EEE virus?

The EEE virus is one of many viruses in the **arbovirus** family, which is shorthand for **arthropod-borne virus**. The most common arthropods for transmitting viruses that cause disease are blood-sucking insects, especially mosquitoes. The virus causes an infection that results in swelling of the brain. The disease can be serious and even fatal. The elderly and very young are susceptible to the disease.

How is Eastern Equine Encephalitis spread?

The virus that causes EEE lives almost exclusively in the bloodstream of infected birds, and in the mosquitoes that bite those birds. The mosquitoes that bite birds greatly prefer birds over horses or people. On rare occasions an infected bird will be bitten by a mosquito that bites both birds and people (and other animals, such as horses), and in that rare situation the virus can “spill over” into a person. The risk of getting EEE, although small, rises during July through September. The adult female mosquitoes that carry the EEE virus are killed by frost in the fall, but the virus can over-winter in birds.

What is the treatment for EEE?

There is no specific treatment. There are no useful antibiotics or anti-viral drugs. Medical care is intensively supportive. EEE cannot be passed directly from person to person.

What can we do to prevent EEE?

There is no human vaccine available. There is an EEE vaccine available for horses and they should be vaccinated every spring. The best way to protect yourself is to avoid mosquito bites as much as possible, by:

- √ using repellents. Insect repellents containing 20-30% DEET work best. Follow the label instructions carefully. Do not use repellents on children younger than two years of age. Repellents containing less than 30% DEET should be used on children 2-6 years of age.
- √ limiting outdoor activity in the evening, when mosquitoes are most active.
- √ maintaining window and door screens to keep mosquitoes out.
- √ reducing mosquito populations; eliminate all standing water that collects in birdbaths, boats, buckets, tires, unused pools, roof gutters, and other containers.
- √ avoiding shaded areas where mosquitoes may be resting.
- √ wearing protective clothing such as long-sleeved shirts and pants.

SYMPTOMS OF EASTERN EQUINE ENCEPHALITIS

- abrupt onset of fever
- headache
- body aches
- stiff neck
- disorientation
- change in level of consciousness
- coma
- tremors
- paralysis
- death

**LIVINGSTON COUNTY DEPARTMENT OF PUBLIC HEALTH
2300 E. GRAND RIVER AVE., SUITE 102, HOWELL, MI 48843-7578
(517) 546-9850
www.lchd.org**