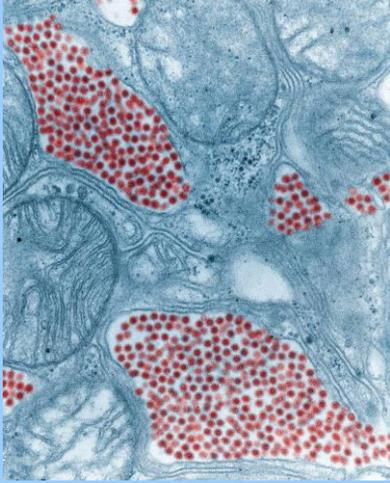


EASTERN EQUINE ENCEPHALITIS

(Family: *Togaviridae*)

**Oneida Lake Status:
Present**



Electron microscope photo of EEE
(Photo credit: CDC)



EEE has been identified in: MA, NH, NY, PA, DE, MD, VA, NC, SC, GA, FL, AL, MS, LA, TX, WI, MI, and IN



EEE is spread by mosquitoes (Photo credit: CDC)

Prepared by:

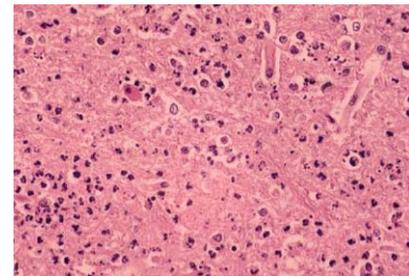
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April 2007

- Occurs primarily in the northeast U.S.
- Fatality rate around 35% in humans
- Infected mosquitoes found near Oneida Lake

Though eastern equine encephalitis (EEE) was first observed in Massachusetts in 1831 when 75 horses died, a human case was not recorded until 1938 when 30 children died. Today, EEE is found in freshwater swamps in the eastern U.S. (like Cicero Swamp), where it is spread from bird to bird by infected mosquitoes. Though capable of infecting mammals, birds, reptiles and amphibians, most animals never develop high enough levels of the virus to become sick or contagious.

EEE is most active between late July and September. In humans infected with EEE, symptoms appear three to ten days after being bitten, and include high fever (103° to 106° F), stiff neck, headache, and lack of energy. Encephalitis (brain inflammation and swelling) is the most dangerous symptom and sets in next. The disease worsens quickly, and some patients go into a coma within a week. In infected humans, EEE has a fatality rate of around 35%.



Brain section from a horse infected with EEE (www.medscape.com)

On July 14th, 2005, despite low mosquito numbers, a Cicero Swamp mosquito tested positive for EEE virus. The following week a cattail mosquito (a known human biter) also tested positive. In response, 7,700 acres of Cicero Swamp received an aerial application of mosquito adulticides. No EEE activity was detected in Onondaga County for the remainder of that season. On August 17, 2006, aerial spraying was conducted over the Toad Harbor Swamp and some surrounding areas on the north shore of Oneida Lake. This was prompted when EEE infected mosquitoes were found in several areas.