

## Eastern Equine Encephalitis Fact Sheet

1. **What is Eastern Equine Encephalitis?** - Eastern Equine Encephalitis (EEE) is a rare but serious disease caused by a virus. The virus infects birds that live in freshwater swamps and is spread from bird to bird by infected mosquitoes. If a mosquito infected with the virus bites a horse or human, the animal or person can become sick. The risk of getting EEE is highest from late July through September.
2. **What are the symptoms of EEE?** - The first symptoms of EEE are high fever (103° to 106°F), stiff neck, headache, and lack of energy. These symptoms show up three to ten days after someone is bitten by an infected mosquito. Inflammation and swelling of the brain, called encephalitis, can develop. The disease gets worse quickly and some patients may go into a coma within a week.
3. **How is EEE diagnosed?** – A definitive diagnosis of EEE disease requires that specimens be collected for laboratory diagnosis. Blood or spinal fluid can be sent to a laboratory and examined for genetic evidence of the virus, to isolate the virus in culture, or to test for the body’s immune response to the infection (antibody testing).
4. **What is the treatment for EEE?** - There is no cure for EEE, and three of every ten people who get the disease die from it. All health care providers treat the symptoms of infection by lowering the patient’s fever and easing the pressure on the brain. Aspirin should be avoided. Hospitalization is often necessary. Some people who survive this disease will be permanently disabled. Few people recover completely.
5. **How is EEE spread?** - The virus that causes EEE is spread only by mosquitoes. People and horses with EEE do not spread the disease.
6. **How common is EEE in Pennsylvania?** - EEE is very rare. Since 1964, only 2 human cases have been reported in Pennsylvania, one in 1968 and one in 1979.
7. **What Can I Do to Prevent EEE Infection?** – The best way to protect yourself in areas where EEE is discovered to be present is to keep infected mosquitoes from biting you. Therefore, the Pennsylvania Department of Health (DOH) recommends that children and adults routinely wear mosquito repellent while outdoors during the April – October mosquito season, especially during dusk and dawn when many mosquito species are actively feeding. Further, the insect repellent should contain DEET, and be applied following the manufacturer’s written directions.
8. **What Can I Do to Reduce the Number of Mosquitoes around My Home?** - Remember mosquitoes will lay eggs in any standing water that may remain for more than four days, and that the adult mosquitoes that emerge from any water seek out the closest humans for their first blood meal. Here are some simple protective steps that can be taken:
  - a. Maintain good screens on windows and doors to keep infected mosquitoes out.

- b. Regularly empty any outside containers, or drill drainage holes in their bottoms.
- c. Turn over plastic wading pools and wheelbarrows when not in use.
- d. Clean clogged roof gutters that may allow the pooling of rain water.
- e. Do not allow water to stagnate in either bird baths or ornamental ponds.
- f. Clean and chlorinate swimming pools and remove standing water from pool covers.
- g. Use landscaping to eliminate standing water that routinely collects around the home.
- h. Remove discarded tires from your property as they make an excellent larva habitat.
- i. For standing water that can't be eliminated, residents can buy either *Bacillus thuringiensis israelensis* (Bti), or *Bacillus sphaericus* (Bsp) tablets at any lawn and garden store. After such a tablet is thrown into the water the bacteria will infect and kill any mosquito larvae present, but the water will remain safe for people, pets, aquatic life and plants.

**9. For more information about Adult Mosquito Spraying:**

[http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnv\\_ReportOverview.htm#youcando](http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnv_ReportOverview.htm#youcando)

**10. For more Eastern Equine Encephalitis information:**

<http://www.cdc.gov/easternequineencephalitis/>

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.