

Saint Louis Encephalitis Fact Sheet

1. **What is Saint Louis Encephalitis (SLE)?** - SLE is a rare, but serious viral infection that is closely related to West Nile Virus. The mosquito-borne virus silently infects bird populations and is then spread from bird to bird by mosquitoes. These infected mosquitoes can also bite humans. The risk of humans getting SLE in Pennsylvania is highest from late July through September when mosquitoes are most abundant. SLE has historically been reported most frequently in the central and eastern United States.
2. **What is the disease incubation period in humans?** – The time from infection to onset of symptoms of SLE is usually 5 to 15 days.
3. **What are the symptoms of SLE?** - Many persons infected with SLE virus have no apparent illness. People with mild illness often have only a headache and fever. More severe infection is marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, occasional convulsions (especially in infants) and spastic (but rarely flaccid) paralysis. The mortality rate from SLE ranges from 5 to 30%, with higher rates among the elderly.
4. **How is SLE diagnosed?** A definitive diagnosis of SLE disease requires that specimens are 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).
5. **How common is SLE in Pennsylvania?** - SLE in the Commonwealth is extremely rare with no human cases having been reported since 1964.
6. **What is the treatment for SLE?** - No vaccine or specific antiviral treatment for SLE is available. Health care providers treat the symptoms of infection by lowering the patient's fever and easing the pressure on their brain. Aspirin should be avoided. Hospitalization is often necessary.
7. **What can I do to prevent SLE infection?** – SLE is transmitted during the warm months of the year when mosquitoes are active. Since there is no SLE vaccine for humans, the best way to ensure personal protection is to prevent mosquito bites. Therefore, the Pennsylvania Department of Health recommends that children and adults routinely wear mosquito repellent while outdoors in the Commonwealth during the April – October mosquito season, especially from dusk to dawn when many mosquito species are most actively feeding. The most effective mosquito repellants will contain DEET and should be applied following the manufacturer's directions.
8. **What can I do to reduce the number of mosquitoes around my home?** - Remember a mosquito will lay her eggs in any standing water that may remain for more than four days, and that the hundreds of adult mosquitoes emerging from water will seek out the closest humans for their first blood meal. Here are some protective steps that can be taken:

- a. Make sure there are screens on windows and doors, and that they are well maintained.
- b. Regularly empty standing water in any outdoor containers or drill drainage holes in them.
- c. Turn over plastic wading pools and wheelbarrows when not in use.
- d. Clean clogged roof gutters and spouts 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 as they collect rain-water which is a mosquito breeding habitat.
- i. For standing water that can't be eliminated, residents can buy either *Bacillus thuringiensis israelensis* (Bti), or *Bacillus sphaericus* (Bsp) “dunks” at many lawn and garden stores. After the dunk is placed in the water the bacteria will disperse, infect and kill any mosquito larvae present, but the water will remain safe for people, pets, and aquatic life.

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

http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnv_ReportOverview.htm#youcando

10. **For more SLE information:** <http://www.cdc.gov/sle/>

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