

La Crosse Encephalitis Fact Sheet

1. **What is LaCrosse Encephalitis (LAC)?** - LAC is a rare, but serious disease caused by a virus. The mosquito-borne virus infects chipmunks and squirrels and is then spread by infected (*Aedes triseriatus*) tree-hole mosquitoes to humans. The tree-hole mosquito will also breed in stagnant water artificial containers such as tires, and small containers. The risk of humans getting LAC is highest from late July through September. Approximately, seventy cases of LAC are reported annually in the United States from the mid-Atlantic and great-Lakes states.
2. **What is the disease incubation period in humans?** – The time from infection to onset of symptoms of LAC is usually five to fifteen days.
3. **What are the symptoms of LAC?** - Many persons infected with LAC 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, convulsions and death. Among those with severe illness, the case-fatality rate is less than 1.0%.
4. **How is LAC diagnosed?** A definitive diagnosis of LAC disease requires that acute and convalescent serum or cerebrospinal fluid specimens, be sent to a laboratory for nucleic amplification testing, serological testing, and/or virus isolation.
5. **How common is LAC in Pennsylvania?** - LAC in the Commonwealth is very rare with one human case having been reported since 2000.
6. **What is the treatment for LAC?** - No vaccine or specific antiviral treatment for LAC is available. All health care providers can do is treat the symptoms by lowering the patient's fever and ease the pressure on their brain. Aspirin should be avoided.
7. **What can I do to prevent LAC infection?** – LAC is transmitted during the warm months of the year when mosquitoes are active. Since there is no WNV 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 mosquitoes will lay eggs in any standing water that may remain for more than four days, and that the hundreds of adult mosquitoes emerging from water near your home will seek out the closest humans for their first blood meal. Here are some protective steps you can take:

- a. Make sure there are screens on your 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 on your property.
- 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 LAC information:

<http://www.cdc.gov/ncidod/dvbid/arbor/lacfact.htm>

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