

IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

ENCEPHALITIS

These infections are caused by any of a number of viruses transmitted by mosquitoes. These infections generally occur during warm weather months when mosquitoes are active. The term encephalitis refers to an inflammation of the brain. The most common diseases in this category are Eastern equine encephalitis, Western equine encephalitis, St. Louis encephalitis, and La Crosse encephalitis.

Symptoms

Symptoms of the various types of viral infections transmitted by mosquitoes are usually similar but differ in severity. Symptoms for most of these infections begin within 5 to 15 days after an insect bite.

- Most infections do not result in any symptoms.
- Mild cases can occur with only a slight fever, headache, and tiredness.
- Sometimes nausea and vomiting occur.
- Severe infections are marked by sudden headache, high fever, neck stiffness, confusion, shaking, seizures, unconsciousness, and infrequently, paralysis or death.

Transmission

- These infections are spread by the bites from infected mosquitoes. Mosquitoes become infected when they feed on birds or animals carrying the virus. Infected mosquitoes then transmit the virus to other birds, animals, or humans when they bite them.
- These diseases cannot be transmitted directly from person to person. Mosquitoes are the only carrier.
- Western and Eastern Equine Encephalitis viruses also infect horses. Outbreaks may occur among horses bitten by infected mosquitoes. Other viruses may incorporate other animals, such as squirrels and chipmunks, into their life cycle.

Treatment

- Blood or spinal fluid can be tested for antibodies. Other tests to confirm the diagnosis may take weeks.
- There is no specific treatment for encephalitis. Antibiotics do not work against viruses, and no effective drugs have been discovered. Patient care centers on treatment of symptoms and complications.
- Once infected, people are immune. However, a person can still get other mosquito-borne viruses.
- There are no human vaccines. Vaccines for horses are available for certain types through veterinarians.

Prevention

- While they can never be completely eliminated, limiting exposure to mosquitoes reduces the likelihood of an infection. Take these steps to protect yourself:
 - Use mosquito repellents on skin and clothing. Campers should consider using bed nets.
 - Wear light-colored clothing — this is less of an attraction to mosquitoes.
 - Avoid outdoor activities during the peak mosquito biting times of dawn, dusk and evening.
 - If weather permits, wear long pants, long sleeves, and/or socks.
 - Stay in screened or air conditioned areas during peak mosquito biting times.
- Eliminate mosquito breeding sites by covering or discarding items that collect water outdoors (for example, rain gutters, buckets, or used tires). Empty containers of standing water weekly.

All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.



c/o Franklin County Public Health, 280 East Broad Street, Columbus, Ohio 43215-4562

Call: (614) 525-8888 • After Hours: (614) 525-3965 • Fax: (614) 525-8890

Email: idsr@franklincountyohio.gov • Web: www.idrsinfo.org

