

Kent County Health Department



Arboviral Encephalitis Fact Sheet

(arthropod-borne encephalitis, eastern equine encephalitis, St. Louis encephalitis, California encephalitis, Powassan encephalitis, West Nile encephalitis)

What is encephalitis?

It is a swelling of the brain. It has many different causes including viruses, bacteria, parasites, and toxins.

When encephalitis is caused by a virus transmitted by mosquitoes or ticks, it is known as arboviral encephalitis. It is most common in the summer and early fall.

How is encephalitis spread?

It is spread by infected mosquitoes. Fortunately, only a few types of mosquitoes are able to spread disease, and only a small number of the mosquitoes will actually be carrying a virus at any one time.

Humans can only be infected by mosquitoes. It is not spread from person to person.

What are the symptoms of encephalitis?

Most people who are infected with an arbovirus either do not get sick or have mild symptoms. Mild cases may occur with only a slight fever and/or headache and body aches. People get better with no complications.

For those who do develop symptoms, they usually start three to 15 days after a bite from a mosquito carrying the virus. A small number of infected people develop encephalitis or meningitis (swelling of the tissues that cover the brain and spinal cord). Symptoms include:

- High fever
- Confusion
- Seizures
- Headache
- Personality changes
- Neck stiffness
- Weakness or paralysis
- Coma
- Other brain problems

Who is at risk for encephalitis?

Anyone can get arboviral encephalitis. The elderly appear to be more at risk. Young children may experience more severe illness with eastern equine encephalitis and certain types of California encephalitis.

How is encephalitis treated?

Health care providers will usually try to relieve the symptoms of the illness, but there is no specific treatment available for arboviral encephalitis.

How can encephalitis be prevented?

The best way to prevent encephalitis is to reduce your risk of being bitten by mosquitoes.

- Use insect repellent containing DEET if spending time outdoors in mosquito- or tick-infested areas. Be sure to follow label directions.
- Wear clothing that covers the arms, legs, and feet whenever you are outdoors.

Arboviral Encephalitis Fact Sheet – page 2

- Spray clothing with repellent as mosquitoes may bite through thin clothing.
- Wear light colored clothing to spot ticks easily.
- Limit outdoor activities at dawn, dusk, and in the early evening when mosquitoes are most active.
- Inspect window and door screens and repair any holes found.
- Remove any standing water around your home. As little as a half inch of water will support dozens of mosquitoes. Steps to take include:
 - Changing the water in your bird bath twice a week.
 - Emptying and cleaning children's wading pools twice a week.
 - Emptying and refilling pet water bowls every day.
 - Covering trash bins to keep them from filling with water.
 - Getting rid of things in your yard that can collect water (jars, bottles, old tires, etc.).
 - Cleaning leaves and sticks out of eaves troughs/rain gutters and checking them often.
 - Storing boats and canoes upside down so they do not collect and hold rain water.
 - Draining or filling any low areas in your yard where water stands for five or more days.

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for talking with a health care provider. If you have any questions about encephalitis or think you may have it, call your health care provider.