

Arboviral Infections

What are arboviral infections?

Arboviral (short for arthropod-borne) infections can be caused by a number of different viruses that are spread by arthropods such as mosquitoes. These infections generally occur during the warm weather months when mosquitoes are active. The most common arboviruses found in Virginia include West Nile virus, St. Louis encephalitis virus, La Crosse encephalitis virus, and eastern equine encephalitis virus.

Who gets arboviral infections?

Anyone can get an arboviral infection but school aged children and the elderly appear to be most susceptible.

What are the symptoms of arboviral infections?

Symptoms of the various types of arboviral infections spread by mosquitoes are generally similar, but differ in severity. Most infections do not result in any symptoms. Mild cases may occur with only a slight fever and headache but may include body aches, nausea and vomiting. Severe infections are marked by high fever, severe headache, stiff neck, and may cause muscle weakness, confusion, disorientation, paralysis, seizures, coma, or death.

How soon after exposure do symptoms occur?

Symptoms usually occur 5 to 14 days after exposure to infective mosquitoes.

How are arboviral infections spread?

Arboviral infections are mostly spread from birds or other animals to people by the bites of infected mosquitoes; a few arboviruses are transmitted through tick bites. Fortunately, although there are over 57 different mosquito species in Virginia, each arbovirus is typically only associated with one or a few mosquito species, and very few of the mosquitoes in any population will be infected. Occasionally, migrating birds may carry arboviruses from one region to another, but people are very unlikely to become infected with an arbovirus from contact with birds, or other animals. Transmission between people does not occur.

Does past infection with an arbovirus make a person immune?

Yes, infection with an arbovirus can provide immunity to that specific virus.

What is the treatment for arboviral infections?

There is no specific treatment available for arboviral infections other than supportive care.

How can arboviral infections be prevented?

Avoid mosquito bites by using insect repellents when outdoors in mosquito-infested areas. Home doors and windows should be well screened to prevent entry of mosquitoes. Eliminate mosquito breeding sites from yards by removing old tires, buckets, toys and other items that hold water. Dump ornamental containers (e.g., bird baths) on a weekly basis, or use mosquito larvicide pellets or dunks periodically to treat larger containers (e.g., ornamental ponds, stagnant swimming pools). Communities or municipalities may establish mosquito surveillance and control programs to reduce mosquito

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populations by spraying insecticides, treating storm sewers and puddles with larvicides, and draining stagnant water from ditches.

How can I get more information about arboviral infections?

- 1) If you have concerns about arboviral infections, contact your healthcare provider.
- 2) Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/LHD/index.htm>.
- 3) Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/>.