

FACT SHEET

ARBOVIRUSES

(LaCrosse, St. Louis, and Eastern Equine Encephalitis)

What are arboviruses?

Arboviruses are those viruses transmitted by mosquitoes. "Arbo" is a shortened form of "arthropod-borne" meaning transmitted by arthropods, which are insects. There are four arboviruses in Iowa: LaCrosse encephalitis, St. Louis encephalitis, western equine encephalitis, and West Nile virus. West Nile virus is addressed in a separate fact sheet.

What are the symptoms of an infection with arboviruses?

Arboviruses infect the brain and may cause it to swell. However, most infected people will not develop any symptoms. A few will develop fever, headache, stiff neck, and lethargy or sleepiness.

How is the disease diagnosed?

Two blood tests spaced 2 - 4 weeks apart are required to confirm the diagnosis. However, your doctor may diagnose these diseases based on symptoms.

How soon do symptoms appear?

Usually 5 - 15 days. St. Louis encephalitis is 4-21 days.

What are the complications of arboviral infections?

Severe infections may result in mental confusion, nervous movements, coma, and occasionally convulsions. Approximately 1% of ill patients will experience permanent brain damage or die.

How are these viruses spread?

Mosquitoes pick up the virus from feeding on infected birds and small wild animals. Then these mosquitoes bite humans and transfer the virus to them. Western equine virus can also infect horses. Infected humans and horses do not directly pass the virus to other humans and horses.

Who gets arboviral infections?

Anyone can get them, depending on exposure to mosquitoes.

How long is a person infectious?

Arboviruses are not spread person to person.

What is the treatment for this illness?

There is no specific treatment. General treatment is given to reduce pain and control swelling of the brain. After having an infection, usually you cannot get it again.

Do infected people need to be excluded from school, work, or child care?

No.

What can be done to help prevent the spread of these viruses?

Protect yourself from mosquitoes by properly screening windows in homes and use of repellents containing DEET (N, N-diethyl-m-toluamide) when outside. The use of large amounts of DEET on small children may cause them to become ill and have seizures. Read and follow directions on all repellents. Since mosquitoes reproduce in water, drain water from containers around homes that collect rain such as tires, ponds and trash receptacles. Reducing stagnant standing water is the most effective way of controlling mosquito numbers. In serious situations communities may spray chemicals to kill mosquitoes or their larvae. There is no vaccine for protection against arboviral disease.