

## Jamestown Canyon Virus



### What is Jamestown Canyon Virus?

Jamestown Canyon virus (JCV) is a virus in the California serogroup, the same group of viruses as La Crosse virus. This virus is spread by mosquitoes and is found throughout North America. Cases have been sporadic, with 15 cases identified in 13 states between 2000 and 2012, 16 cases in 2013, and 11 cases in 4 states in 2014. The CDC added JCV to the domestic arbovirus routine testing list in 2013, which caused an increase in number of cases identified. Most cases have been either younger than 18 years old or older than 60 years old.

### What are the Symptoms?

There are several mild symptoms associated with JCV, such as: fever, muscle aches, headaches, or flu-like symptoms.

In more severe cases, JCV may affect the central nervous system and cause encephalitis (inflammation of the brain) or viral meningitis (inflammation of the membranes that surround the brain and spinal cord). These serious conditions can result in seizures, coma, or paralysis.

Due to the small number of cases, it is unknown how long it takes for symptoms to develop after infection. Illnesses from related viruses typically develop a few days to two weeks after infection.

### What is the Treatment for JCV?

There is no specific treatment for JCV. When medical care is needed, the illness is addressed according to the symptoms.

### How is JCV Spread?

Jamestown Canyon virus has been isolated in several different species of mosquitoes throughout the United States. Several of these species are found in Louisiana, such as *Aedes albopictus* (Asian Tiger Mosquito), *Aedes vexans* (Floodwater Mosquito), *Anopheles quadrimaculatus*, *Coquillettidia perturbans*, *Culiseta inornata*, *Ochlerotatus sollicitans*, *Ochlerotatus taeniorhynchus*

(Black Salt Marsh Mosquito), *Aedes/Ochlerotatus triseriatus* (Tree Hole Mosquito), *Psorophora columbiae*, *Psorophora ferox*, and others. Since there are several species which carry JCV, the virus likely has a longer season than other mosquito-borne viruses. Illness onsets have ranged from May to September.

These mosquitoes become infectious after they bite an infected host, such as a human or another mammal. White-tailed deer have been identified as a common host of the virus in other states.

It is theoretically possible for hunters to become infected when handling deer. However, with the safety measures already recommended due to the other bacterial diseases found in animals, there is no significant increase in risk. Also, there is likely a decrease in transmission during deer hunting season, when there are fewer mosquitoes due to the colder temperatures.

### How to Prevent JCV?

No drugs or vaccines for preventing JCV infection are currently available.

The best prevention strategy is protection from mosquito bites:

- Wear long-sleeved shirts and long pants or permethrin-treated clothing
- Use door and window screens in good repair to keep mosquitoes outside
- Empty standing water and scrub, turn over, cover, or throw out items that can hold water around your home (including tires, buckets, planters, toys, trash, and gutters)
- Use insect repellent according to instructions (containing DEET, picaridin, IR3535 and some oil of lemon eucalyptus and para-menthane-diol products). More information about insect repellents can be found on the CDC West Nile virus website, "Insect Repellent Use & Safety"

<https://www.cdc.gov/westnile/prevention/index.html>