

Jamestown Canyon Virus

What is Jamestown Canyon virus?

Jamestown Canyon virus (JCV) is a rare viral infection that is transmitted by mosquitoes.

How does someone get JCV?

JCV is caused by an arbovirus and is transmitted to people by mosquitoes. If a mosquito bites an animal that is infected with JCV, the mosquito can then transmit it to a person by biting them. JCV is found throughout temperate North America and it circulates primarily in the deer and mosquito populations.

How common is JCV?

Since 2000, more than 50 cases of JCV have been identified nationally. The cases have primarily been in the Midwest and Northeast.

When was JCV discovered?

JCV infections were initially described in the early 1970s as causing a mild illness with fever. JCV infections can occur anywhere from May through the end of summer.

Who is most at risk of JCV?

Anyone who lives in the affected areas and gets a mosquito bite can potentially be exposed to Jamestown Canyon virus, but the risk of infection and the risk of serious illness is considered low risk.

What are the symptoms of JCV?

Symptoms can include fever, muscle aches, fatigue, dizziness, headache and in severe cases the virus infects the central nervous system and can cause brain inflammation (encephalitis) and inflammation of the membranes surrounding the brain and spinal cord (meningitis).

How long does it take the symptoms to appear?

Since there have been so few documented cases it is not known how long it takes for symptoms to develop.

How is JCV diagnosed?

Laboratory testing is required to determine if someone is infected with JCV since the symptoms are so similar to many other illnesses. If someone is suspected of having JCV, samples will be collected and sent by the NH Department of Health and Human Services to the Centers for Disease Control and Prevention (CDC) for testing.

What is the treatment for JCV?

Currently there is no specific treatment for JCV, but patients are given supportive care, such as hydration, depending on their symptoms.

Is there a vaccine available?

There is no vaccine available for Jamestown Canyon virus.

What should people do to protect against this virus?

The most effective way to prevent JCV infection is to avoid being bitten by mosquitoes. Repellents are the best tool in preventing mosquito-borne illnesses. When outdoors and mosquitoes are biting, it is important to use a repellent that contains 30% DEET or permethrin. Repellents that contain Picaridin, para-menthan-diol, or oil of lemon eucalyptus have also been determined to be effective. Wear long pants and long-sleeved shirts when possible to prevent mosquito bites.

For specific concerns or questions about Jamestown Canyon virus, call the NH Department of Health and Human Services at 603-271-4496. For further information, refer to the [Centers for Disease Control and Prevention](#).