

# Yet another mosquito-borne threat: The 'Jamestown Canyon virus'

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You've probably heard of West Nile virus, but mosquitoes spread

various other illnesses, too, including the little-known Jamestown Canyon virus (JCV), which is garnering attention across the United States.

For example, [health officials](#) in Connecticut have so far identified mosquitoes carrying JCV in 12 towns across the state. Although no confirmed human cases of the [disease](#) have occurred there this year, scientists are watching it carefully, as it's affecting more people around the United States.

"In the last six years, we have seen an increase in the number of reported disease cases," said [Stacey Martin](#), an epidemiologist with the U.S. Centers for Disease Control and Prevention. However, "this could be due to better awareness of the disease and more testing."

In rare cases, JCV can cause [severe disease](#), including infection of the brain (encephalitis) or the membranes around the brain and spinal cord (meningitis), Martin warned.

However, "we are learning that most people who are exposed to JCV do not develop symptoms. We also know that many people with mild symptoms, such as fever, fatigue and headache, may not seek medical care," she added.

By comparison, while an average of 17 JCV cases are reported annually, thousands of cases of West Nile virus are reported on average, Martin noted.

But because the consequences are occasionally severe and the number of cases is seemingly growing, JCV is another reason to try to avoid [mosquito bites](#), experts say.

"We need to continue to look at JCV disease surveillance data to identify

possible trends," Martin said.

In the United States, cases are most often reported from Minnesota and Wisconsin, she noted.

The virus was named for the area in Colorado where it was first identified. It has been around for many years and is found in almost all U.S. states and also in Canada.

A 2018 study found that more than 20% of people living in Nova Scotia, Canada, had antibodies to the virus, meaning they had been infected at some time in their lives.

According to the U.S. Centers for Disease Control and Prevention, most cases occur from late spring through mid-fall.

JCV lives in deer and mice and can be transmitted to mosquitoes when they bite these animals. It spreads to people when the mosquitoes bite us, said [Dr. Bruce Hirsch](#), an infectious disease specialist at North Shore University Hospital in Manhasset, N.Y.

Hirsch said you needn't worry if you are bitten by a bug carrying the virus, noting it rarely causes problems.

"Very, very occasionally, and very, very rarely it causes serious health issues," he noted. "Most of us who have been in contact with this virus don't even know it," Hirsch said.

"Occasionally, it can cause some fever. It can cause some headache, and the most serious adverse effects, which are uncommon, would include meningitis and occasionally encephalitis, the most serious adverse effect of Jamestown Canyon virus," he said. "Thankfully, this is very, very unusual."

Encephalitis is rarely fatal, but it can have long-term consequences, specifically thinking problems that can last for some time, Hirsch said. Encephalitis may also cause stiff neck and seizures.

There's no treatment for Jamestown Canyon virus, and no vaccine to prevent it, Hirsch added.

Treatment is just supportive, aiming to keep the patient comfortable and to prevent seizures.

There are steps you can take to avoid the infection.

To prevent exposure to JCV and other mosquito-borne diseases, like West Nile [virus](#) and [eastern equine encephalitis](#), use [insect repellent](#) and wear long-sleeved shirts and pants when you go outside, Martin said. This is especially important at dusk and dawn, when mosquito activity is at its peak.

Also, be aware of any standing or stagnant water, which is where mosquitoes lay their eggs. Once a week, the CDC recommends that you empty or throw out any items that hold water like vases and flowerpot saucers. You should also tightly cover water storage containers such as rain barrels, or cover them with a fine mesh.

**More information:** For more on Jamestown Canyon Virus, see the [U.S. Centers for Disease Control and Prevention](#).

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