

# THIS IS AN OFFICIAL NH DHHS HEALTH ALERT

Distributed by the NH Health Alert Network  
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## Human Case of Jamestown Canyon Virus (JCV) in New Hampshire

### Key Points and Recommendations:

1. New Hampshire's first human infection with Jamestown Canyon Virus (JCV) in 2017 has been identified. JCV is an uncommon arboviral infection that is transmitted through the bite of an infected mosquito.
2. Healthcare providers should consider mosquito-borne diseases, including JCV, West Nile Virus (WNV), and Eastern Equine Encephalitis (EEE) in patients presenting with compatible clinical syndromes.
3. Laboratory testing for mosquito-borne diseases can be arranged by calling 603-271-4496 during business hours or 603-271-5300 after hours. Testing information is also available at: <https://www.dhhs.nh.gov/dphs/lab/documents/labrequisition.pdf>.
4. Healthcare providers should report suspected and confirmed cases of mosquito-borne diseases to the Bureau of Infectious Disease Control at 603-271-4496 (after hours 603-271-5300).

### Background:

The New Hampshire Division of Public Health Services (NH DPHS) has identified a human case of Jamestown Canyon Virus (JCV) in an adult who resides in Hanover, NH. This individual became ill July 15, 2017 and probably acquired this infection in NH.

JCV is a mosquito-borne pathogen that circulates widely in North America primarily between deer and a variety of mosquito species, but it can also infect humans. Reports of JCV in humans are rare, and most human illnesses are either asymptomatic or manifest with mild febrile illness. Moderate and severe central nervous system complications, including meningitis and encephalitis, can also occur. There is no specific treatment for JCV, and care is supportive until symptoms resolve.

JCV was first detected in NH in May 2013. One additional human case occurred in November 2015. Nationally since the beginning of 2017, 14 cases of JCV have been reported. More information about the epidemiology of JCV in the U.S. can be reviewed in this journal article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4530766/>

### Testing for JCV and other Mosquito-Borne Diseases:

Laboratory diagnosis of mosquito-borne infections is through testing serum and/or cerebrospinal fluid (CSF) for virus-specific IgM and neutralizing antibodies (plaque reduction neutralization test). Laboratory testing for the mosquito-borne diseases WNV, EEE, St. Louis Encephalitis, Chikungunya virus, and Zika virus is available at the New Hampshire Public Health Laboratories (PHL). Testing for other arboviruses, including Powassan Virus and Jamestown Canyon Virus, is available at the Centers for Disease Control and Prevention (CDC). Testing arrangements should be made in consultation with NH DPHS. Please call the Bureau of Infectious Disease Control at 603-271-4496 (after hours 603-271-5300).

For more information, including specimen collection instructions, please refer to:  
<http://www.dhhs.nh.gov/dphs/cdcs/arboviral/documents/arboguidelines.pdf>

More information about how and when to report a suspected arboviral illness can be found in our earlier HAN: <https://www.dhhs.nh.gov/dphs/cdcs/alerts/documents/mosquito-2017.pdf>.

**For additional information on mosquito-borne diseases:**

1. Information on arboviral illnesses and maps of recent activity can be found on the NH DHHS website: <http://www.dhhs.nh.gov/dphs/cdcs/arboviral/results.htm>.
2. The Centers for Disease Control, Division of Vector-Borne Infectious Diseases website: <http://www.cdc.gov/ncidod/dvbid/arbor/index.htm>.
3. Fact sheets on WNV and EEE:  
<http://www.dhhs.nh.gov/dphs/cdcs/arboviral/publications.htm>.
4. Fact sheet on JCV: <https://www.dhhs.nh.gov/dphs/cdcs/documents/jamestown-canyon-virus.pdf>

For any questions regarding the contents of this message, please contact NH DHHS Bureau of Infectious Disease Control at 603-271-4496 (after hours 603-271-5300).

To change your contact information in the NH Health Alert Network, contact Thom Flynn at 603-271-7499 or email [thomas.flynn@dhhs.nh.gov](mailto:thomas.flynn@dhhs.nh.gov).

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Originating Agency: NH Department of Health and Human Services, Division of Public Health Services

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