



# *Powassan virus* Disease

## **What is *Powassan virus* disease?**

*Powassan virus* disease is a tick-borne illness caused by the Powassan virus. It is a rare disease in Canada.

## **What are the symptoms?**

Most people who are infected do not have any symptoms. However, for those who do, symptoms usually appear within 1 to 4 weeks after the bite of an infected tick occurred. Some people will have mild flu-like symptoms, such as fever, sore throat, headache, and fatigue. Powassan virus can cause severe disease, including infection of the brain (encephalitis) or the membranes around the brain and spinal cord (meningitis). Severe infections are marked by a quicker onset and Symptoms include confusion, loss of coordination, difficulty speaking, and seizures.

## **How is *Powassan virus* disease spread?**

*Powassan virus* disease is spread through the bite of infected ticks. The blacklegged tick (*Ixodes scapularis*) is found in southeastern and south-central Canada; and the groundhog tick (*Ixodes cookei*) and squirrel tick (*Ixodes marxi*) are found in southeastern Canada. These tick species are present in New Brunswick. Powassan virus disease cannot spread directly from one person to another.

## **How is *Powassan virus* disease diagnosed?**

*Powassan virus* disease is diagnosed based on a physician's assessment of a patient's symptoms, history of exposure to blacklegged ticks and laboratory testing. If you think you or a family member may have Powassan virus disease, it is important to consult a healthcare provider.

## **Who is at risk of *Powassan virus* disease infection?**

The risk is highest in geographic areas where both the tick species and the pathogen that can cause human disease are found. Cases have been reported in southeastern and south-central Canada. The chances of being bitten by a tick are greater during times of the year when ticks are most active (spring, summer, and fall). People who work outdoors or engage in outdoor activities such as camping/hiking, gardening, or playing in grassy and wooded environments are at an increased risk of exposure.

## **How can *Powassan virus* disease be prevented?**

The best prevention is through awareness. Be Tick Smart and find out where blacklegged ticks are most likely to be found. Protect yourself against tick bites with tick repellent, check for ticks after coming indoors,

## A-Z DISEASE FACT SHEETS

remove ticks safely, contact a health care provider or local pharmacist for assessment of tick bites, and see a health care provider if you have symptoms of tick-borne diseases.

### **How is *Powassan virus* disease treated?**

Treatment is supportive care. Hospitalization may be required for individuals with severe disease.

### **What is the public health response?**

Health care providers and laboratories must notify cases of Powassan virus disease to Public Health. Public Health staff may interview the health care provider and patient (or caregivers) to find out how the infection occurred, identify other people at risk of infection, implement control measures and provide other advice.

### **Further Information**

For additional information, contact your health-care provider, **local Public Health office** or **Tele-Care 811**.

### **USEFUL WEBSITES**

[Tick-Borne Diseases \(gnb.ca\)](http://Tick-Borne-Diseases.gnb.ca)

Public Health Agency of Canada [phac-aspc.gc.ca](http://phac-aspc.gc.ca)

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