

POWASSAN VIRUS DISEASE



Powassan virus (POWV) disease is an illness spread to humans in Wisconsin by the *Ixodes scapularis* tick (also known as the blacklegged tick or deer tick). POWV infection is rare, but can cause serious illness. In the U.S., there have been over 300 cases of POWV disease in the past 10 years. Forty-eight of those cases were in Wisconsin. About half of survivors of severe POWV disease have long-term health problems such as chronic headaches, weakening or loss of muscle, and memory problems. Anyone can get POWV disease, but people who spend more time outdoors are at higher risk of being bitten by an infected tick.

What causes it?

- ▶ POWV is spread to humans through the bite of an infected black-legged tick. Ticks can be found in areas with woods, brush, or tall grass. It is unknown how long a tick must be attached to spread POWV, but it is likely less than 12 hours and could be as little as 15 minutes.
- ▶ POWV is spread during the spring, summer, and fall by both adult ticks and the young nymph stage of the tick. The risk for POWV is highest in the spring and early summer, when the nymphs are most active. People may not remember being bitten by a tick because the black-legged nymphs are very small, about the size of a poppy seed.

What are the signs and symptoms?

Many people infected with POWV have no signs or symptoms. When someone does have symptoms, they usually start 1-5 weeks after being bitten by the tick.

Mild Symptoms

- ▶ Fever
- ▶ Headache
- ▶ Vomiting
- ▶ Weakness

Severe Symptoms

- ▶ Swelling of the brain and spinal cord
- ▶ Coma
- ▶ Seizures
- ▶ Confusion
- ▶ Memory loss
- ▶ Death (In about 10% of cases)

What are the treatment options?

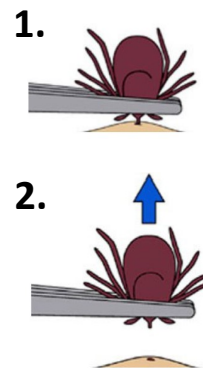
There is no vaccine to prevent POWV, and there are no medicines to treat POWV disease. If symptoms are severe, a person may have to go to the hospital for medical attention.

How can it be prevented?

Follow these steps to reduce your risk of being bitten by a tick:

- ▶ When outdoors, wear a long-sleeved shirt, long pants, and high socks with pant cuffs tucked into the socks. Wear light-colored clothing so ticks are easier to see.
- ▶ Walk in the center of trails and try not to brush up against shrubs and tall grass.
- ▶ Wear insect repellent with 20-30% DEET, or use 0.5% permethrin on clothes. Follow directions on manufacturer's label. Find the right [repellent for you](#) on the Environmental Protection Agency's (EPA) website.
- ▶ Do tick checks on yourself and others after coming in from outside and quickly remove any ticks.
- ▶ Take a shower after coming in from outside to remove insect repellent and any ticks on the body.
- ▶ Put clothing worn outside in the dryer on high for at least 10 minutes to kill any ticks that may still be on clothes.

HOW TO REMOVE A TICK:



Use tweezers to remove the tick. Grip the tick by its mouthparts, as close to the skin as possible. Pull straight up. Wash the area with soap and water.

