

# Deer Ticks: What You Should Know

You have probably heard about deer ticks and the Lyme disease that they can cause, but did you know they can also carry a virus more deadly than Lyme disease?

Powassan (POW) virus is more rare, but also much more serious than Lyme disease. POW virus is an arthropod-borne virus that can cause encephalitis (inflammation of the brain) and meningitis (inflammation of the membranes surrounding the brain and spinal cord). Most cases have occurred in the Great Lakes and northeastern regions of the U.S. in late spring, early summer, and mid-fall, when ticks are generally most active. Ticks are most commonly encountered while walking in wooded areas or fields with tall grass, but even those of us not living in/near wooded areas are at risk for deer ticks, especially if we have pets who go outdoors.



Until fairly recently, Powassan was found in a species of tick that rarely bites people; however, it has now been discovered in deer ticks, which could mean we will be seeing more cases. Approximately ten percent of the 75 people known to have contracted the virus in the past decade died from the virus, and many survivors suffer from life-long neurological problems, such as headaches and memory and muscle loss.

Symptoms of Powassan include fever, headaches, vomiting, seizures, difficulty speaking, confusion, and weakness. Symptoms can present from one week to one month after being transmitted. Not everyone who becomes infected with POW will develop symptoms.

At this time, there is no specific treatment, so your best defense is a good offense: minimize the risk of you or your pets coming into contact with deer ticks. For those of us living in the Great Lakes region, this can be difficult. The CDC recommends wearing long sleeves and pants, using a bug repellent with at least 20 percent DEET, picaridin, or IR3535. Be aware that DEET does pose some health risks, so it's best to spray it on your clothes, near the openings where deer ticks could get on your skin, but do not spray DEET directly on your skin. Also, avoid walking through heavily wooded areas. When you come inside, check yourself and your pets for ticks, and run your clothes through the dryer on the high heat setting.

Two other diseases that can be transmitted by the deer tick include anaplasmosis and babesiosis. Although rare, both of these conditions can be fatal (generally in less than 1% of people infected). Symptoms are similar for both conditions: fever, chills, malaise, headache, muscle ache, and nausea/abdominal pain. Additionally, babesiosis can cause hemolytic anemia. Symptoms of these conditions generally appear within 1-2 weeks of being bitten.

If you develop symptoms of any of these conditions, see your medical practitioner for testing.

If you find a tick attached to your skin (or your pet's), use fine-tipped tweezers to grasp the tick as close to the skin's surface as possible. Pull upward with steady, even pressure (don't twist or jerk). If you can't get the mouth parts easily, leave them there and allow the area to heal. Thoroughly clean the area with rubbing alcohol, an iodine scrub, or soap and water. Dispose of a live tick by submersing it in alcohol, placing it in a sealed bag/container, wrapping it tightly in tape, or flushing it down the toilet. Never crush a tick with your fingers.

