

Powassan Virus

In last month's edition of *PharmAid*, an article focussed on the prevention and treatment of tick bites. A related topic deserves attention this month after three recent cases of Powassan virus were reported in Wisconsin. If you're not aware, Powassan virus is typically rare in Wisconsin, however three recent cases this year led to a death in one patient and hospitalizations in the other two.

As a review, Powassan virus is transmitted to humans after being bitten by an infected deer tick. The first case was reported in Wisconsin in 2003, and most cases have been identified in the northern half of Wisconsin. Anyone can be susceptible to the virus if bitten by a tick that is a carrier, so prevention of bites is the best defense. Symptoms of Powassan virus typically present within one week to one month after the tick bite. Many people remain without symptoms and never know they've been infected. Others can present with a range of mild to severe symptoms. For those with severe cases, death occurs in roughly 10%, and those who survive often have long-term or permanent neurological symptoms.

- Common early signs/symptoms
 - Fever
 - Headache
 - Nausea
 - Vomiting
 - Muscle weakness
 - Stiff neck
- Severe symptoms
 - Confusion
 - Loss of coordination
 - Paralysis
 - Speech difficulty
 - Seizures
 - Memory loss
 - Encephalitis
 - Meningitis

There is no treatment or vaccine for Powassan virus. Pain relievers can be given for mild symptoms and more severe cases may need supportive care via hospitalization

The Wisconsin Department of Health Services has more detailed information and resources via their [website](#).