



NAVY AND MARINE CORPS PUBLIC HEALTH CENTER

PREVENTION AND PROTECTION START HERE

Powassan Virus Disease

Powassan (POW) virus disease is transmitted through tick bites. POW virus disease has been reported in the northeastern and Great Lakes regions of the United States during late spring, early summer, and mid fall when ticks are most active. The [Centers for Disease Control and Prevention](#) estimates there have been approximately 75 cases of POW virus disease in the United States over the past 10 years. Recent warmer winters have led to an increased tick population, which can increase the likelihood of tick-borne infections such as POW virus disease.

How do you become infected?

POW virus is transmitted by the bite of infective ticks. There are several species of ticks capable of transmitting the virus to humans including the deer tick (left) and American dog tick (right). POW virus is not transmitted person to person.



Who is at risk?

Risk is highest for people who live, work, or engage in recreational activities in brushy or wooded areas where POW virus is commonly found.

What are the symptoms of POW virus disease?

Symptoms include fever, headache, weakness, confusion, loss of coordination, speech difficulties, and seizures. Many people who are infected will not develop any symptoms. If symptoms do occur, they usually appear between one week and one month after being bitten by the infective tick. POW virus can infect the central nervous system and cause inflammation of the brain (encephalitis) and the membranes surrounding the brain (meningitis). Approximately 10% of POW virus encephalitis cases are fatal.

How is POW virus disease treated?

There are no vaccines or medications to treat POW virus disease. Your health care provider can help evaluate you if you suspect you are infected.

How do you prevent being infected?

Reducing exposure to ticks is the best defense against POW virus disease and other tick-borne infections. The Navy Entomology Center of Excellence (NECE) has more information about tick avoidance and removal of ticks:

<http://www.med.navy.mil/sites/nmcphc/Documents/nece/NECE-Tick-Factsheet.pdf>