

## Lyme Disease

Lyme disease is caused by the spirochete *Borrelia burgdorferi*. The spirochete is acquired by the bite of an infected tick. Lyme disease is now regarded as the most common tick-borne illness in the United States.

The principal reservoir for the spirochete is the white-footed mouse, while the white-tailed deer harbors the tick but not the spirochete. Lyme disease is spread during tick season, May through August, peaking in July.

The disease in dogs is characterized by sudden onset of lameness. It is usually the only sign of infection. One or more joints may become swollen and painful to the touch. Occasionally some dogs will experience weakness, lethargy, loss of appetite and weight loss. The lameness may last only a few days, but in some cases it can become chronic and last or recur for months.

Blood tests will indicate whether a dog has been exposed to the disease. Dogs may not test positive for a few weeks after exposure. Ticks must attach themselves to a dog for 5 to 20 hours before they are capable of transmitting infection. Prevention is the best cure. Checking dogs daily for ticks will prevent many dogs from becoming infected. Frontline Plus is a once a month topical treatment that kills both ticks and fleas. Lyme Disease vaccine is recommended and is widely used to prevent Lyme Disease in dogs. It is much easier to prevent than to cure.

Human concerns: Dogs cannot transmit Lyme Disease to humans although they can spread ticks carrying the spirochete. Once a tick starts feeding it will not seek another host. Most human infections come from direct tick to human contact.

Treatment: Antibiotics are given for two to four weeks. Ampicillin and Doxycycline are among the most effective, but other antibiotics have been successful.