

## LYME DISEASE AND TICKS

At the average rate of 1,500 cases per year, Lyme disease is receiving considerable press every year. Magazines, television and newspapers have all carried stories of the disease and its spread. However, there are other disease organisms that are also transmitted to humans by ticks. There are about 1,000 cases of Rocky Mountain Spotted Fever reported every year. The tick that spreads this disease is far more common than the deer tick that spreads Lyme disease. The ticks that spread these two diseases are active in late summer and fall. People working or playing outdoors should continue to avoid areas with known tick populations and should wear protective chemicals when in the woods.

Lyme disease is a tick-transmitted bacterial disease that is most likely to be contracted during the months of June through September. This disease is apparently spreading rapidly, and is now the most frequently diagnosed tick-transmitted illness in the U.S. The disease was first reported from the town of Lyme, Connecticut in 1975.

The symptoms of Lyme disease are variable, and they range from acute headache to neurological impairment and symptoms resembling rheumatoid arthritis. The onset of these symptoms usually follow a skin rash one to several days before. Lyme disease can be treated successfully with antibiotics administered orally.

Lyme disease is transmitted by Ixodes species ticks. These very small ticks are usually associated with small to large animals, but can also take a blood meal from humans. There are several species of Ixodes in the East coast and they could be carrying the Lyme disease bacteria in their system.

The deer tick, the most common transmitter of Lyme disease, is extremely small (1/16 to 1/8 inch). This makes detection and removal difficult. The life cycle of deer ticks lasts about two years. The female deposits about 3,000 eggs in the spring. The larvae emerge in 6 weeks and seek a small mammal (mouse, chipmunk) as a host. The white-footed mouse is a preferred host. After feeding, the larva enters a resting phase and the next spring molt to a slightly larger nymph. Again, they seek a blood meal and then molt to an adult by the fall. The adult female overwinters and lays eggs in the spring.

