

On The Line with Safety

While we are exposed to many obvious and visible hazards on a daily basis, there is one that may go undetected until it's too late. Any guesses? It's the Blacklegged (or deer) tick. The Blacklegged tick can transmit several tick borne diseases including anaplasmosis, babesiosis and Lyme disease.

Blacklegged ticks live for two years and have three feeding stages: larvae, nymph and adult. Tick eggs are laid in the spring and hatch in the fall. Larvae feed on mice, birds and other small animals in the summer and early fall. When young ticks feed on an infected animal, the tick tacks bacteria into its body along with the blood meal, and remains infected for the rest of its life. Larvae then become inactive as they grow into nymphs. The following spring nymphs seek blood meals to fuel their growth into adults. When the tick feeds again it can transmit bacterium to its new host. Usually the host is a small rodent, but sometimes it can be a human. Most cases of human illness are in late spring to early summer, (May-July) when nymphs are most active.

There are several ways to protect ourselves from tick bites. Ticks prefer wooded and bushy areas with high grass and a lot of leaf litter. Take extra precautions in May, June and July. This is when ticks that transmit Lyme disease are most active. Use insect repellent 20% - 30% Deet on exposed skin and clothing. Permethrin is another type of repellent that kills ticks on contact. Permethrin should not be applied directly to the skin. One application to pants, socks and shoes typically stays effective through several washings. Wear long pants, long sleeves and long socks to keep ticks off your skin. Tucking in clothing will help to keep ticks from getting on your skin. Perform daily tick checks after being outdoors. Inspect all parts of your body carefully including your armpits, scalp and groin. If a tick is attached to your body for less than 24hrs your chance of getting Lyme disease is extremely small. The longer a tick is attached the more exposed you become to Lyme disease. If a tick needs to be removed from the skin, use a pair of fine tipped tweezers. Grab the tick close to the skin and pull straight away from the body. Monitor your health closely after a tick bite and be alert for any possible symptoms.

Lyme disease symptoms can infect several parts of the body, producing different symptoms at different times. Not all patients will have the same symptoms, and many symptoms can occur with other diseases as well. The first sign of infection is usually a circular rash. The rash occurs in approx. 70-80% of infected persons and begins at the site of the tick bite within 3-30 days. The rash can expand over a period of several days reaching up to 12" across. The center of the rash may clear as it enlarges resulting in the classic bull's-eye appearance. Some patients can develop additional lesions in other areas of the body after several days.

Untreated, the infection may spread to other parts of the body within a few days to weeks. These symptoms may be discrete. Some symptoms are loss of muscle tone on one or both sides of the face, severe headaches, and neck stiffness, shooting pains, heart palpitations and dizziness due to changes in heartbeat, and pain that moves from joint to joint.

Tick bites, with infection, may go undetected and untreated for several months or longer. Approximately 60% of patients with untreated infection will begin to have intermittent bouts of arthritis with severe joint pain and swelling. Large joints are most often affected, especially the knees. Up to 5% of untreated patients may develop chronic neurological complaints months to

years after infection. Some symptoms include shooting pains, numbness or tingling in the hands or feet, and problems with concentration and short term memory loss.

Most cases of Lyme disease can be cured with treatments of antibiotics, especially if treatment is begun early in the course of the disease. A small percentage of patients with Lyme disease have symptoms that last months to years after treatment with antibiotics. Some symptoms can include muscle and joint pain, arthritis, cognitive defects, sleep disturbance or fatigue.

Maryland continues to be plagued with an extremely high Blacklegged (deer) tick population. A proactive approach to self monitoring can save you months and possibly years of pain and discomfort.

Included are accident briefs calendars. Graphic compiled from reports gathered by, or submitted to TCIA staff.

Rich Godwin, CTSP

Think Safe, Be Safe, Safety First