

# ***External Parasites: Ticks***

## **The Basics Of Ticks**

No trip into the woods, hiking, camping, or the like would be complete without contemplating those fun little parasites known as ticks. Ticks are found worldwide in several types of environments. Around the midwest, they tend to frequent woodlands and long grass meadow environments. Ticks can infest dogs and people all year around, although they occur more often in warmer seasons.

Ticks are not insects, they are more closely related to spiders and scorpions. Approximately 850 species of ticks exist worldwide. They cannot fly, only crawl. Ticks use a sensory organ known as Haller's organ to identify heat and humidity in order to locate their next food source.

Ticks feed on blood and only blood. Every stage of development of the tick - larvae, nymphs, and adults, may parasitize dogs and people. Ticks feed by attaching to a host, boring a hole in the skin, and inserting their feeding tube into the hole. Their saliva contains an anticoagulant to allow them to feed uninterrupted.

## **Tick Species**

- *Rhipicephalus sanguineus* is the "Brown Dog Tick" and can be found nationwide.
- *Dermacentor albipictus* affects animals in the northern and western states.
- *D. variabilis* is the "American Dog Tick" and occurs from the eastern seashore to the Rocky Mountains.
- *D. andersoni* is the "Rocky Mountain Spotted Fever Tick" and transmits this disease.
- *Ixodes scapularis* is the "Deer Tick" and transmits Lyme disease.

## **The Life Cycle Of Ticks**

Ticks have a relatively simple life cycle. It passes through four developmental stages: egg, larva, nymph, and adult. The adult female lays eggs in spring on the ground. These eggs typically hatch in the summer, depending upon the ambient temperature and moisture. The tick larva are small enough that ten of them may fit on the head of a pin. The larva finds its first host and feeds. It then detaches, falls to the ground, and finds a suitable location to molt. As a nymph, the tick's next life stage, it remains dormant over winter and in spring finds another host and feeds again. After a second molting, an adult emerges and seeks out more host animals on which to feed. Later in the year, after mating, the male tick dies and the female tick lives through the winter to lay her eggs before completing her life cycle in the spring.

## **Transmission of Ticks**

Ticks most often crawl onto a suitable passing animal, pet, or person. They find a suitable place for themselves to attach and feed. Pets often come into contact with ticks by entering the environments in which they live: woods and long grass meadows.

## **Symptoms Of Tick Exposure**

Most often pet owners find either the ticks or a small lesion where the tick fed. Rarely do ticks actually constitute an actual infestation as they tend to be solitary creatures, but when enough ticks routinely feed on a dog or cat, the results can be horrible. The direct rapid loss of blood can cause severe anemia.

Ticks pose more risk for the diseases they spread and for introducing potential allergens to dogs and cats.

- Lyme Disease
- Cytauxzoonosis
- Rocky Mountain Spotted Fever
- Haemobartonellosis
- Tularemia
- Tick Paralysis
- Ehrlichiosis
- Hepatozoonosis
- Dipetalonema reconditum which is a parasite that lives in the skin.

Some of these diseases can affect people as well as dogs and cats.

## **Treatment And Prevention Of Ticks**

If you find a tick on your dog, we recommend seeing your veterinarian to have it removed safely. Ticks secrete a substance that cements them to their host animal and prevents easy dislodgement. This makes the removal of a tick a little more complex. Your veterinarian will identify the type of tick and therefore the possible diseases your pet may have been exposed to.

Check your pets and yourself whenever you return from areas of possible tick exposure, such as forest, long grass meadows, farmland and rural areas, etc. We recommend a topical medication for dogs to repel and kill ticks.

## **Possibility Of Human Complications From Ticks**

Just like dogs and cats, ticks can parasitize people as well. Their main risk remains the same with people as with pets, the diseases that they transmit.

For more information regarding the risk of tick born diseases to people, contact North Shore Veterinary Clinic at 847-966-3080.