



Your Horse's Life Is Our Life's Work

Dr. Jay Joyce

A tick(ing) time bomb is set to explode this season.

Health and insect experts are calling it a perfect storm of conditions coming together to create what is expected to be an extremely heavy tick season. And with ticks, come the dangers of tick-borne disease for horses, dogs, and humans.

Ticks are more prevalent in tall grass and wooded areas inhabited by deer. While most people may be aware of deer ticks, which carry Lyme disease and are found in the Northeast region of the country, it's important to remember that different species of ticks are found across the U.S. and that they carry a variety of other diseases.

Horses in Northern Virginia are commonly affected by two tick-borne diseases.

Anaplasmosis

Anaplasmosis is the tick-transmitted disease that most commonly causes illness in horses. The causative organism, *Anaplasma phagocytophilum*, is a bacterium that was previously called *Ehrlichia equi*, hence the persistent older disease name, Equine Ehrlichiosis. Ticks can also transmit this organism to humans and other animal species, including dogs and livestock, resulting in similar clinical illness.

Symptoms

Once bitten:

- The horse generally becomes sick 3-14 days after the infected tick bite.
- The fever in the early stage of the disease is generally very high (103° to 106° F).
- Younger horses under 4 years old tend to have mild or no clinical signs where as geriatric horses may become more ill.
- Others clinical signs may include lower limb edema, depression, reluctance to move, depressed appetite, and occasionally staggering.

Diagnosis

Diagnosis is based on clinical signs, as well as testing for *Anaplasma* from a blood sample. The SNAP 4DX test can be used stallside to get confirmation quickly.

Treatment

Antibiotic treatment is usually very effective if the horse is treated soon after the signs of illness begin. The antibiotic of choice is oxytetracycline, which is administered intravenously followed by oral doxycycline. Relapses may occur if antibiotic treatment is too short. Other supportive care, such as nonsteroidal anti-inflammatory drugs (NSAID, eg. Banamine), and leg support wraps, are often employed.

Ticks should be removed and destroyed. Other horses on the same farm should also be checked for both ticks and early signs of illness. There is no vaccine for this disease, so a horse owner's best defense is to minimize tick habitat in their horse's environment, use topical insecticides that include a label claim for ticks, and to remove any ticks found on the horse as promptly as possible.

Lyme Disease

Lyme disease is caused by the bacterium *Borrelia burgdorferi*. Clinical signs of Lyme disease vary and can be non-specific.

Symptoms

These include:

- Lethargy
- Stiffness
- Skin sensitivity
- Change in behavior
- Unspecified lameness
- Neurologic abnormalities

Diagnosis

It's currently based on a combination of history, clinical signs, response to antibiotic therapy, risk of probable exposure, and blood tests. It should be emphasized, however, that the results of blood tests do not always correlate with disease status. [READ MORE](#)

Prevention & Treatment

There is no vaccine for Lyme disease in horses. Vaccination is currently being done off-label using the canine vaccines. The vaccines have proven to be safe in anecdotal trials, but the effectiveness of the vaccine in horses has not yet been published. Vaccination of at risk populations of horses should be based on a veterinarian's recommendation. [READ MORE](#)
Learn about TEVA's protocol for Lyme Vaccination in horses [here](#).

Most Common Species of Ticks in Northern Virginia

