Tickborne Disease Fact Sheet

**What are Ticks?**
Ticks are considered parasitic arachnids, the same category that spiders belong to. There are two types of ticks, hard bodied and soft bodied. The hard bodied ticks are the dominant tick in Ohio, as the only soft bodied tick is present only in bat colonies. They survive by feeding on another animal (host) that will provide them with food (blood).

**Ticks in Ohio**
There are 3 main species ticks in Ohio. The first in the American Dog tick, followed by the Lone Star tick, then the Deer Tick. The Asian Longhorned Tick is a new species within the state that may spread a variety of tickborne illnesses.

**Habitat:**
- **American Dog Tick**
  - **Transmission | Lyme Disease | CDC**
  - Habitat: The American Dog tick prefers areas with woods, shrubs, or long grass. Properties with weeds, clutter, and debris will attract rodents, which are hosts for these ticks. Keeping grass and weeds short and property clear of debris helps decrease tick populations. An adult American Dog tick can go two years between feedings. While out walking, dogs can easily pick up these ticks. Therefore, it is important to treat your animal with approved products. The dog tick waits on a grass blade to grab on to a host as it passes.
- **Deer Tick**
  - **Transmission | Lyme Disease | CDC**
  - Habitat: The Deer tick likes wooded and brushy areas. These ticks tend to be found on the edge of woods, such as along trails. They are rarely found out in open areas. These ticks search for their host from the tips of low-lying grass, plants, and shrubs. They will not be found in trees. The Deer tick does not jump, but rather grabs on to people and then crawls up to the area it wants to feed.
- **Lone Star Tick**
  - **Transmission | Lyme Disease | CDC**
  - Habitat: The Lone Star ticks like forested areas that have underbrush areas as well as the areas where animals rest along rivers and creeks. Lone Star ticks are more aggressive than other ticks and will chase their hosts.
- **Asian Longhorned Tick**
  - **What you need to know about Asian longhorned ticks - A new tick in the United States | Ticks | CDC**

**Sources:**
7. Minnesota Department of Health, Ticks. Retrieved from: Ticks - Tickborne Disease - Minnesota Dept. of Health (state.mn.us)
Tick Life Cycle
The life stages of a tick start as eggs, progress to the 6-legged larva, then 8-legged nymph, then adult.¹

What is Lyme Disease?
There are 300,000 new cases of Lyme disease diagnosed in the United States each year.⁵ Lyme disease is caused by the bite of a tick, which carries the bacteria *Borrelia burgdorferi* and is transmitted through the bite of an infected tick.⁶

Symptoms
Lyme disease symptoms have a wide range and include:⁷
- Rash (in the shape of a bullseye)
- Neurological (face drooping, limb tingling)
- Carditis (when Lyme disease enters the heart)
- Arthritis (when Lyme disease enters joints)

Treatment
Early diagnosis as well as proper antibiotic treatment is important in the treatment of Lyme disease (CDC).⁸ Additionally, laboratory testing via blood sample is necessary for proper diagnosis.⁸

Tick Season
Do ticks have a season? Yes and no. The picture below shows that ticks are around in Ohio all year long. Larvae peak between August and September, while nymphs are highest in May and continue through August and September. Adult tick numbers are highest in September. Lyme disease cases highest counts are recorded in July but start to increase in May and continue through August.⁹

How Ticks Spread Disease
Ticks can feed on a variety of hosts – mammals, birds, reptiles, and amphibians. Not all ticks carry Lyme disease. To be infected, a tick must first feed on an animal, not human, carrying the bacteria for Lyme disease. This is then passed on when the infected tick bites a human.

Diseases Spread by Ticks
In addition to Lyme disease, there are other diseases associated with tick bites that are serious and life-threatening.

- Rocky Mountain Spotted Fever
- Anaplasmosis
- Babesiosis
- Colorado Tick Fever
- Powassan Encephalitis
- Tularemia
- Ehrlichiosis
- Relapsing Fever

Sources:
5. Johns Hopkins Medicine, Ticks and Lyme Disease, "What Causes Lyme Disease?". Retrieved from: Ticks and Lyme Disease | Johns Hopkins Medicine
9. Ohio Department of Natural Resources, Recreational Safety, "Ticks in Ohio". Retrieved from: Ticks in Ohio | Ohio Department of Natural Resources (ohiodnr.gov)