

TICKS:

Awareness and Prevention

Central Racine County Health Department

Deer Tick
(Blacklegged Tick)



Lone Star Tick











Wood Tick
(American Dog Tick)



What is a Tick:

- Ticks are arachnids, relatives of spiders.
- Ticks live in wooded areas, brushy fields, and around your home.
- There are primarily two kinds of ticks in Wisconsin, the deer tick and the Dog (wood) tick. The lone star tick population has been steadily increasing over the years in Wisconsin.
- The deer tick can transmit Lyme disease, anaplasmosis, babesiosis, and Powassan virus infection (a rare tickborne arbovirus illness).
- Deer ticks are prominent in Wisconsin from May through August.

<i>Species</i>	Larva	Nymph	Male	Female
Deer Tick <i>Ixodes scapularis</i>				
Dog Tick <i>Dermacentor variabilis</i>				

Diseases Transmitted by Ticks in Wisconsin:

- Anaplasmosis
- Babesiosis (*Babesia* infection)
- Ehrlichiosis
- Lyme disease (*Borrelia burgdorferi* infection)
- Powassan virus infection
- Spotted Fever Rickettsiosis (RMSF)
- includes Rocky Mountain spotted fever and Typhus fever



Deer ticks : Lyme disease, babesiosis, anaplasmosis



Dog ticks : Rocky Mt. spotted fever



Lone Star ticks : Ehrlichiosis

Fig. 1 Most common human- and pet-biting ticks encountered & disease association

How Ticks Find Their Hosts:

- Ticks can feed on mammals, birds, reptiles, and amphibians.
- Ticks find their hosts by detecting animals' breath and body odors, or by sensing body heat, moisture, and vibrations.
- Ticks must eat blood at each stage of life to survive.
- Ticks wait for a host, resting on the tips of grasses and shrubs. Ticks can't fly or jump, but many tick species wait in a position known as "questing".



How Ticks Feed:

- When the tick finds a feeding spot, it grasps the skin and cuts into the surface.
- Ticks secrete small amounts of saliva with anesthetic properties so that the animal or person can't feel that the tick has attached itself. If the tick is in a sheltered spot, it can go unnoticed.
- The tick then inserts its feeding tube. Many species also secrete a cement-like substance that keeps them firmly attached during the meal. The feeding tube can have barbs which help keep the tick in place.
- If the tick is carrying a disease such as Lyme disease, the tick can spread the disease to humans during feeding.



Signs and Symptoms:

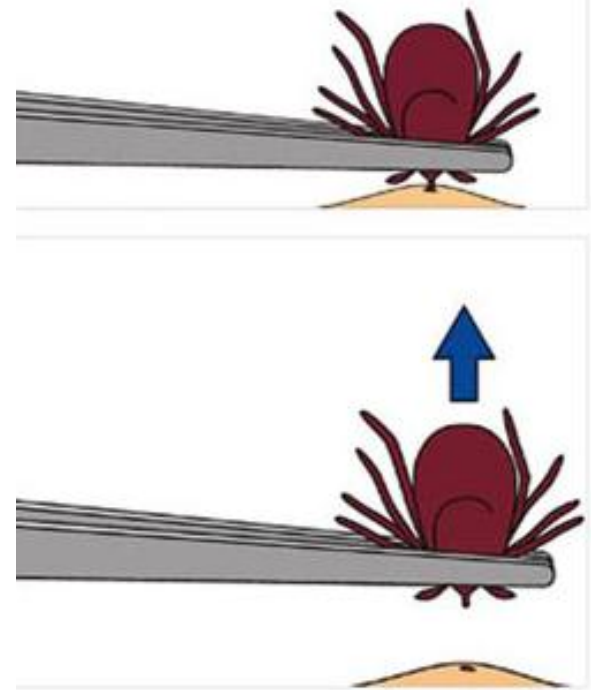
- **Fever/chills:** With all tickborne diseases, patients can experience fever at varying degrees and time of onset.
- **Aches and pains:** Tickborne disease symptoms include headache, fatigue, and muscle aches. With Lyme disease you may also experience joint pain. The severity and time of onset of these symptoms can depend on the disease and the patient's personal tolerance level.
- **Rash:** The rash often starts as a roughly reddish circle. Appears around or near the site of the tick bite. The rash expands in size over a period of days or weeks.



Persons who experience a tick bite should be alert for symptoms suggestive of tickborne illness and consult a health care provider if fever, rash, or other symptoms of concern develop.

How to Remove a Tick:

- Use fine-tipped tweezers to grasp the tick as close to the skin's surface as possible.
- Pull upward with steady, even pressure. Don't twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers, leave it alone and let the skin heal.
- After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, an iodine scrub, or soap and water.



Prevention Tips:

- Wear a long-sleeved shirt, long pants, and high socks.
- Light colored clothing will make ticks easier to find.
- Conduct thorough "tick checks" on yourself and your children after spending time outdoors.
- Prompt removal of ticks, even after they have attached, can drastically reduce the chance of Lyme disease transmission.
- Wear repellent products containing DEET can be effective in repelling deer ticks. If such products are used, be sure to follow the manufacturer's directions on the label.



Don't forget to check your pets too!

Tick Control:

- Mow lawns frequently and remove cut grass and leaves.
- Use wood chips or gravel as a barrier between lawns and wooded areas.
- Remove woodpiles or stack wood neatly in dry areas away from houses to prevent rodent harborage.
- Keep tables, swing sets, play equipment, etc. away from woods, shrubs and tall grass. Place in a sunny location, if possible.



For More Information:

- <http://www.cdc.gov/ticks/avoid/>
- <http://www.dhs.wisconsin.gov/communicable/Tickborne/TickPrevCtrl.htm>
- <http://www.dhs.wisconsin.gov/publications/P4/P42070.pdf>
- <http://www.cdc.gov/lyme/resources/TickborneDiseases.pdf>
- <http://www.tickencounter.org/>