protect yourself from tick-borne diseases

Ticks can be found in most of the United States, and may carry serious diseases. Some of the diseases that you can get from a tick bite include:

- Anaplasmosis
- Babesiosis
- Colorado tick fever
- Ehrlichiosis
- Lyme disease
- Powassan encephalitis
- Q fever
- Rocky Mountain spotted fever
- Southern tick-associated rash illness (STARI)
- Tick-borne relapsing fever
- Tularemia

**Lyme disease** is the most frequently reported tick-borne illness in the United States. People become infected with Lyme disease through the bite of a black-legged tick (*Ixodes scapularis* or *pacificus*) that is infected with the bacterium *Borrelia burgdorferi*.

Recognize the Ticks!

Some ticks can transmit more than one pathogen. The pictures below show three of the common adult ticks found in the United States. Younger ticks that are smaller and less distinctive may also transmit disease.

**Black-legged ticks** (*Ixodes scapularis*) can transmit several tick-borne diseases, such as anaplasmosis, babesiosis, and Lyme disease.

**Lone star ticks** (*Amblyomma americanum*) have been linked to ehrlichiosis and Southern Tick-Associated Rash Illness (STARI).

**American dog tick** (*Dermacentor variabilis*) can carry diseases such as Rocky Mountain spotted fever and tularemia.

Recognize the Symptoms!

People of all ages can be infected. There is no vaccine currently available to prevent Lyme disease or most other tick-borne diseases, so early detection and treatment are important. Most tick-borne diseases can be treated successfully. Early detection and treatment can prevent more serious illness.

Early symptoms of tick-borne diseases may include:

- Fever
- Headache
- Fatigue
- Rash

See a health care provider if you develop these symptoms after a tick bite.

For more information: [http://www.cdc.gov/lyme](http://www.cdc.gov/lyme) or call: 1-800-311-3435
take these steps to reduce your risk...

Avoid Tick Bites!

1. Avoid Areas with Lots of Ticks.
   • Avoid wooded and bushy areas with high grass and leaf litter.
   • Take extra precautions late spring through early fall when ticks that transmit disease are active.
   • Walk in the center of the trail when in the woods or high grass.
   • Ask your local health department and park or extension service about tick infested areas to avoid.

Keep Ticks off Your Skin.
   • Apply insect repellent with 20% DEET or more on skin and clothing when you go outdoors (for kids too!). Don’t spray repellent on skin under clothing.
   • Permethrin sprayed on clothing kills ticks on contact and provides protection through several washings. Don’t use permethrin on skin.
   • Cover up! Wear long pants, long sleeves, and long socks. Light-colored clothing will help you spot ticks more easily. Tucking pant legs into socks or boots and tucking shirts into pants help keep ticks on the outside of clothing.

2. Perform Tick Checks!
   • Remove ticks from your clothes before going indoors. Wash your clothes with hot water and dry them using high heat for at least one hour.
   • Check your body and your child’s body for ticks after being outdoors, even in your own yard. Use a mirror to view all parts of your body (in armpits, behind ears, in groin, etc.) and remove any ticks you find.

   • Safely remove ticks. Early tick removal may reduce the risk of infection of some tick-borne diseases. Follow the steps below to safely remove ticks from animals and humans.
     1. Use fine-tipped tweezers and protect bare hands with a tissue or gloves to avoid contact with tick fluids.
     2. Grab the tick close to the skin. Do not twist or jerk the tick, as this may cause the mouthparts to break off and remain in the skin.
     3. Gently pull straight up until all parts of the tick are removed.
     4. After removing the tick, wash your hands with soap and water or waterless alcohol-based hand rub. Clean the tick bite with an antiseptic such as iodine scrub, rubbing alcohol, or soap and water.
     5. Contact your healthcare provider if you develop fever, headache, fatigue, or rash.

   • Use tick medicine or collars on dogs and cats. Check pets regularly for ticks.

3. Control Ticks around Your Home and in Your Community
   • Create Tick-Safe Zones. Many infections happen in your own yard! Remove leaf litter and brush around your home and at the edges of lawns. Place wood chips or gravel between lawns and wooded areas. Mow the lawn and clear brush regularly. Keep playground equipment, decks and patios away from yard edges and trees.

   • Apply pesticide to control ticks. A single application to your lawn at the end of May or beginning of June can reduce Ixodes tick populations by 68-100%.

K. Stafford, CT Agricultural Experiment Station New Haven CS#109745