



## **Shelton Public Schools Integrated Pest Management Related To TICK CONTROL**

### **Ticks**

Ticks are not insects but blood-feeding arthropods related to spiders and mites. The adult tick has eight legs where insects have six legs. Ticks can feed on a variety of animals including birds, amphibians, reptiles, and mammals (including people) and can be a carrier of many diseases, including Lyme disease. The primary habitats for ticks are wooded areas and the open or grassy areas at the edges of wooded areas.

On school properties, ticks are most often found on playgrounds, athletic fields, cross-country trails, paths, and school yards located in and adjacent to wooded areas, especially where deer and other wildlife hosts are abundant.

Ticks are sometimes of concern on school properties, especially those species that can transmit serious diseases to humans. Management practices include: a) personal protective measures (such as wearing appropriate clothing, avoiding habitats associated with ticks, and judicious use of insect repellents), b) landscape modifications, and c) if necessary, limited use of pesticides as a targeted barrier treatment.

On humans, ticks migrate around the hairline, the area behind the ears, or in the armpits. It takes five to six hours for a tick to become firmly attached and up to ten days for it to become fully engorged with blood.

Connecticut has two common types—the deer tick and the dog tick.

### **The Deer Tick**

Also known as the “black-legged tick”, is a small tick found statewide, and is the principal vector of Lyme disease in the northeastern United States.

Ticks must remain attached to the host for at least 24 hours in order to infect the host. The early signs of the disease usually show up as a rash at the bite site followed by flu-like symptoms. Medical care should be sought when a person is bitten by a deer tick or exhibits Lyme disease symptoms.

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## **The American Dog Tick**

Also called the wood tick, is larger than a deer tick and the female has a whitish shield on its back. This tick readily attaches itself to humans and is one of the most commonly encountered ticks in Connecticut. The dog tick is larger than the deer tick and is not known for spreading diseases.

## **Managing School Properties to Reduce Tick Problems**

Landscape management practices designed to make the landscape more inhospitable to primary tick hosts may reduce a tick population. The most important step is to cut back vegetation and remove vegetative debris to reduce shade and moisture. Keep grass, weeds, and brush mowed short.

## **Prevention**

Limiting exposure to ticks is presently the most effective method of prevention. Wear light-colored clothing. This will allow ticks to be detected more easily. Wear long sleeves and long pants that are tight around the wrist, ankle, and neck. Tuck pants into socks to prevent ticks from crawling up the inside of pants' legs. Walk in the center of paths and avoid vegetation along path edges. Treat exposed areas of skin with repellents to discourage tick attachment (supplied by parents and only with parental permission). Adults and students should check themselves immediately after visiting a potentially tick-infested area. Pay close attention to hair, armpits, shoulders, waist, and inner thighs. Remove any tick found on the body.

## **Removal of Ticks**

Use fine-tipped tweezers to remove attached ticks. Grasp the tick as close to the skin surface as possible and pull upward with steady, even pressure. Do not twist or jerk the tick; this may cause the mouthparts to break off and remain in the skin. If this happens, remove mouthparts with tweezers or consult the school nurse. Do not squeeze, crush, or puncture the body of the tick because its fluids may contain infectious organisms. Do not handle the tick with bare hands because infectious agents may enter through mucous membranes or breaks in the skin. Apply rubbing alcohol to the bite and wash hands with soap and water.

Save the tick for future identification should disease symptoms develop within 2-3 weeks. Place the tick in a small vial containing rubbing alcohol. Write the date of the bite on a piece of paper with a pencil and place it in the vial.

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## Chemical Control

The application of pesticides is prohibited except in certain emergency situations. There is a provision in this law that allows for the emergency use of pesticides to eliminate threats to human health. The determination of health threat may be made by: local health directors, superintendents of public schools, the state Department of Public Health (DPH), or the Department of Environmental Protection (DEP).

If approved, the pesticide application should be limited to high-risk tick habitat such as edges of lawn and woodlands.

Spraying open fields and lawns is not necessary. The product must be labeled for area-wide tick control. Pesticides cannot be applied on school grounds except by a licensed commercial applicator.

## Fact Sheets and Other Resources on Ticks

- [Tick Safety in Schools - Integrated Pest Management for Protecting Children from Tick-Borne Diseases](#) - An EPA document that includes detailed information about tick management around schools.
  - [Springtime Means Tick Time: Learn to Protect Yourself](#) - A blog post that includes links to other tick resources.
  - [Stop Ticks](#) - Tick bite prevention for pets and for children and adults playing or working in their backyard, from CDC.
  - [Tick-borne Diseases of the U.S.](#) - This CDC Web page reviews 12 diseases transmitted by ticks and provides links to additional information.
  - [IPM Management Manual: Ticks](#) - This National Park Service web page reviews the different types of ticks, lifecycles, and non-chemical control options.
  - [Ticks Fact Sheet](#) from the National Park Service Office of Public Health
  - [Tick Bite Prevention \(PDF\)](#) (6 pp, 170 K, [About PDF](#)) - A scholarly article written by Dr. Kirby C. Stafford III and published by the Connecticut Agricultural Experiment Station.
  - [School IPM Fact Sheet \(PDF\)](#) (4 pp, 171 K) on Ticks from the Maine Department of Agriculture
  - [IPM Action Plan for Ticks](#) - This Web page provides information regarding the identification, removal, prevention and monitoring of ticks, as well as links to other resources.
  - [Read more about integrated pest management.](#)
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