

*Ticks bite, and some species are vectors of human disease, including Lyme disease and Rocky Mountain spotted fever. The risk of tick-borne disease can be reduced through the use of Integrated Pest Management (IPM)—smart, sensible practices that include landscape management, personal protection and education.*

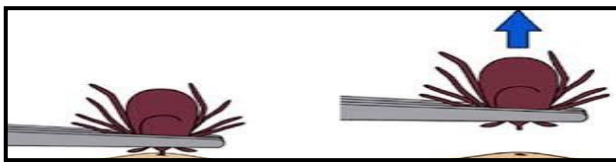
### Ticks in Schools

Ticks are of concern on school grounds, especially species that vector diseases such as Rocky Mountain spotted fever, Lyme disease, babesiosis, ehrlichiosis and Powassan encephalitis. Ticks can be found on playgrounds, sports fields, trails and school yards located in and adjacent to wooded areas, especially where deer and other wildlife hosts are abundant.

### The School Nurse Role

The School nurses can play a key role in preventing tick-borne illness by advocating for integrated pest management (IPM) policies and practices—sensible, evidence-based methods to reduce tick encounters and prevent bites. The school nurse can educate students, staff and families how to avoid ticks and when to seek medical treatment for tick-borne illness. Nurses can also play a key role in tick surveillance by reporting where, when and what kinds of ticks are found on students.

The school nurse should work with administrators, facilities managers and other members of the health and safety team to review and upgrade the school's tick prevention, monitoring and management program based on the principles of Integrated Pest Management. Below are IPM best practices for tick control to share with school staff and students.



### If a Tick is Found Attached to the Skin

Use fine-tipped tweezers to grasp the tick as close to the skin as possible. Pull gently until the tick detaches. If using a tick 'spoon', slide it forward to frame the tick in small part of the V-shaped slot, then use a continuous sliding motion until the tick detaches. Do not twist or jerk the tick. This may increase the risk of disease transmission. Don't worry if mouthparts break off and remain in the skin; disease transmission cannot occur after the rest of the tick is removed, and the mouthparts will fall out as the skin heals.

- After removing the tick, clean your hands and the bite area with soap and water. You may also apply an antiseptic to the bite.
- Place the tick in a zipper-lock bag. Contact your local

### Integrated Pest Management Best Practices

- Reduce tick habitat by mowing lawns, clearing tall grasses and brush around playgrounds and at the edge of lawns, removing leaf litter from trails and pruning trees and shrubs to reduce shade.
- Move playground equipment away from wooded areas.
- Discourage rodents by sealing gaps in and under buildings, sheds, dugouts and other structures. Eliminate bird feeders, refuse piles and stacks of stored equipment to discourage birds and rodents that can carry ticks and diseases.

### Promote Personal Protection

- Avoid wooded or brushy areas, tall grass and leaf litter.
- Walk in the center of trails. Keep children within designated playground areas.
- Use an EPA-approved repellent that contains DEET, picaridin or IR3535 on exposed skin. For additional repellent information visit: <https://www.epa.gov/insect-repellents/find-repellent-right-you>
- Consider wearing permethrin-treated clothing if going into heavily tick-infested areas.
- Use a buddy to check for ticks after outdoor activity.
- Perform a full-body tick check using a hand-held or full-length mirror to view all parts of your body upon return from tick-infested areas.

### What Can Schools Do?

- Reduce tick habitat by mowing lawns, clearing tall grasses and brush around playgrounds and at the edge of lawns, removing leaf litter from trails, and pruning trees and shrubs to reduce shade.
- Place a 3-foot wide barrier of wood chips or gravel between lawns and wooded areas to discourage tick migration into recreational areas.
- Move playground equipment away from woodland edges.
- Discourage rodents by sealing gaps in and under buildings, sheds, dugouts and other structures. Eliminate bird feeders, refuse piles and stacks of stored equipment to discourage tick- and disease-carrying birds and rodents.

### What Can Students Do?

- Avoid wooded and brushy areas with high grass and leaf litter.
- Walk in the center of trails and play within designated playground areas.

## Monitoring for Ticks

Monitoring is the key to identifying which species of ticks are present, how many, which life stages and where they are found. This information is critical to managing ticks and reducing health risk to people. The most efficient and cost effective method is tick dragging. To make a tick drag, attach a 3-foot by 3-foot square of light-colored cloth to a wooden dowel; heavy flannel or corduroy are particularly effective. Tie a loop of twine to the dowel for a handle. Pull the tick drag over the ground and low vegetation to collect ticks. Ticks will cling to the cloth, allowing you to collect, count and identify them. Keep detailed records to document the date, location and number of ticks of each species collected. Use this information to assess risk, place signage or fencing to minimize human encounters with

ticks, target landscape modifications or pesticide applications and measure the effectiveness of control actions taken.

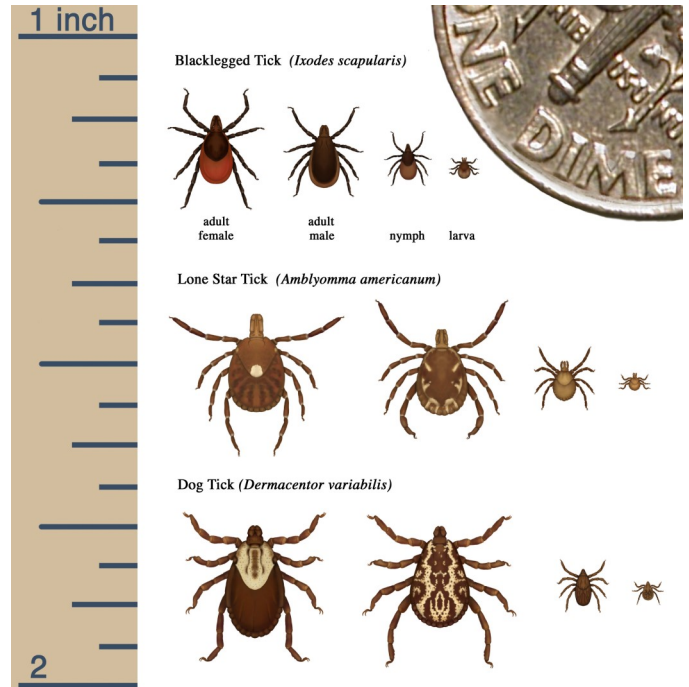


Image sourced from [Centers for Disease Control and Prevention](https://www.cdc.gov)



1. Neck & Back of Head
2. Armpits & Upper Arms
3. Waistline and Groin Area
4. Ankles (Near Socks)

## Tick Monitoring and Response Action Chart

