

Facilitator Guide



This guide also contains background information and resources about ticks for the facilitator's benefit. The content in this guide is not intended for direct delivery to students but should instead use as a supplement to the lesson content; instructors should exercise their discretion when presenting supplementary content to students according to the ages, backgrounds, interests, and capabilities of their students.

ABOUT BLAST

This program complements the State of Delaware Board of Education Science Content standards pertaining to life cycles and ecosystems appropriate for Kindergarten, First and Second grade. It also complements Health Education Content Standards for K through Second grade pertaining to health enhancing behaviors, health promotion, decision making, and injury prevention.

According to the (CDC, 2022) The greatest risk of being bitten exists in the spring, summer, and fall in the Northeast, Upper Midwest and mid-Atlantic. However, adult ticks may be out searching for a host any time winter temperatures are above freezing. All life stages bite humans, but nymphs and adult females are most found on people.

Learning Objectives:

- Identify a blacklegged tick (deer tick)
- Explain how ticks can transmit diseases to people and animals.
- Identify tick habitat in Delaware.
- Explain how to prevent tick bites.
- Explain how a tick should be properly removed if attached to themselves or a pet.

Materials Needed

Computer

Projector

PowerPoint

Instructor Guide

Suggested Use

Review the Learning Objectives, Background Information, and Vocabulary in this guide to become acquainted with key topics presented in the lesson.

- Engage students prior to the lesson presentation using the Discussion Questions.
- Share Lesson Presentation with students.
- Complete in-class Activities or provide as take-home activities.
- Administer Post-presentation Quiz to assess the students' understanding of key learning objectives.

Suggested Time Required:

30 minutes this can easily be achieved in during morning meeting circle time 5–7-minute increments over a period of days.

Background Information for Instructors

Discussion Questions

1. How many of you know what a tick is? Do you think it's a type of insect?
2. Where have you seen a tick before? On you? On a pet? Outside somewhere?
3. Have you ever been bitten by a tick before? What do you think a tick eats?

Vocabulary	Definition
Acronym	an abbreviation formed from the initial letter of other words and pronounced as a word.
Arthropod	an invertebrate animal of the large species Arthropod, such as an insect, spider, or crustacean
Bull's-eye rash	a red, expanding rash that looks like a target or bull's eye; this is the most common symptom of Lyme disease and can be found at the site of the tick bite or anywhere else on the body.
Black-legged tick (deer tick)	<i>Ixodes scapularis</i> is commonly known as the deer tick or black-legged , which is found on the west coast of the US.
Habitat	the natural environment of an organism; the type of place in which it is natural to live and grow.
Lyme Disease	Lyme disease is the most common vector-borne disease in the United States. Lyme disease is caused by the bacterium <i>Borrelia burgdorferi</i> .
Numbs	cause (a sensation) to be felt less intensely; deaden:
Insect Repellent	a spray applied to skin to prevent insect bites. or bug spray.
Safeguard	measure taken to protect someone or something or to prevent something undesirable.
Symptom	a physical or mental feature which is regarded as indicating a condition of disease, particularly such a feature that is apparent to the patient.

Slide 2 Learning Standards

- **Delaware Academic Standards Environment and Ecosystem**
- **The National Health Education Standards (NHES) Health Smart 8 core standards:**

K-ESS3-3

1-LS1-1

1-LS1-2

1-LS3-1

2-LS4-1

Slide 3 Learning Outcomes

- Identify a blacklegged tick (deer tick)
- Explain how ticks can transmit diseases to people and animals.
- Identify tick habitat in Delaware.
- Explain how to prevent tick bites.

Explain how a tick should be properly removed if attached to themselves or a pet.

Slide 4 Scientists

Scientists in Delaware study ticks to learn more about them and where they live to help people and animals know how to stay safe and protect themselves and the ones they love!

Slide 5 What is BLAST

Slide 6 This is a Tick

Here is a black-legged tick, also known as a deer tick. This one is an adult female tick. It has a reddish-brown body, eight legs, and a unique mouthpart.

Slide 7 A tick is a tiny arthropod.

Ticks are small arthropods. They have eight legs and two main body parts: the head and the abdomen. Look how tiny they are compared to the seeds on a hamburger bun!

Slide 8 Ticks are found.

Ticks like damp, shady areas; you may encounter ticks hiding near stone walls, dead tree trunks and branches, tall grasses, and the wooded edge of outdoor spaces. Ticks spend 95% of their life in the leaf litter on the forest floor during their two-year life cycle!

Slide 9 How does a tick give you Lyme?

Slide 10 Ticks can bite you.

Black-legged ticks attach themselves to people and animals and feed on their blood. They use their sharp mouth to bite into the skin and suck blood for nourishment.

Slide 11 Ticks can make you sick.

Ticks carry germs. The Lyme disease bacterium can infect several body parts, producing different symptoms at different times. Not all patients with Lyme disease will have all symptoms, and many of the symptoms can occur with other conditions. It is essential to recognize these early symptoms and receive timely treatment.

Slide 12 Ticks can give you Lyme disease.

Symptoms:

- Tiredness
- Headache
- Achy Joints
- Fever.

Signs and symptoms may not develop right away. They can take days or weeks to manifest. If someone has symptoms after being bitten by a tick, they should see a healthcare provider or a doctor.

Slide 13 Lyme disease may give you a rash.

A bull's eye rash is specific to Lyme disease, but it's essential to know that not everyone with Lyme disease gets a rash, so you need to see your doctor to confirm.

Slide 14 Will it hurt if a tick bites me?

Just in case you were wondering if tick bites aren't painful.

Slide 15 If my friend has Lyme disease, can I catch it too?

Lyme disease isn't contagious like a cold. You can only get Lyme disease from an infected tick.

Slide 16 NOOOO! You can only catch Lyme from ticks!

Slide 17 What if I find a tick on me?

Slide 18 Tell a grown up!

Slide 19 They will take the tick off you.

Slide 20 Tick Removal

Here are directions a grown-up can use to get the tick. They must grab the tick as close as they can, so make sure you try to stay still.

Slide 22

BLAST stands for the 5 ways to prevent Lyme disease.

Slide 23 BLAST

Slide 24 Bathe

The “B” in BLAST reminds us to bathe or shower soon after coming indoors. Research shows that bathing or showering within 2 hours of coming indoors helps remove ticks not yet attached to you.

Slide 25 BLast

The “L” in BLAST reminds us to...

Slide 26 LOOK

The “L” in BLAST notes that you should look for Ticks and Rashes on your body after coming in from outside. Most studies have shown that it takes 24-48 hours to transmit the bacteria that causes Lyme disease to occur once a tick bites you, so finding and removing the tick as soon as possible may reduce your risk of getting the disease; the sooner, the better!

Slide 27 Ask your mom or dad to help you look for ticks every night!

Common areas to focus on are around the neck, back, back of the knees, waist, armpits, and groin area.

Slide 28 Blast

The “A” in BLAST reminds us to...

Slide 29 Appy repellent.

“A” is for Applying repellents to skin and clothing. When applied to the skin, DEET has been found to repel ticks at 30% to 40%. Using repellents, while proven effective, is a personal decision. For questions about the use of pesticides, contact the National Pesticide Information Center at <http://npic.orst.edu> or 1-800-858-7378.

Slide 30 BlaSt

The “S” in BLAST reminds us to...

Slide 31

Safeguard your yard. Create a Tick Safe Zone!

- Keep grass mowed.

Remove leaf litter, brush, and tall weeds from around the home and the edge of your lawn.

- Use plantings that do not attract deer or exclude deer through various types of fencing. Deers are the primary food source for adult ticks.
- Move firewood, birdhouses, and feeders away from home.
- Create a 3-foot or more comprehensive wood chip, mulch, or gravel barrier between your lawn and wood

Slide 32 Safeguard yourself.

Slide 33

Wear protective clothing:

- Tuck pants into socks.
- Wear boots.
- Wear long pants and long sleeves.
- Wear light colored clothing.

Avoid tick habitat:

- Walk in middle of trails.
- Don't brush against bushes.

Slide 34 BlasT

The "T" in BLAST reminds us

Slide 35 Treat your pests.

- Check your pets for ticks!
- Ask your vet what you can put on your pet to keep ticks off them.
- Don't sleep with your pet because ticks on your pet may crawl onto you.

Slide 36 Quiz Time!

Let's review what each letter in the BLAST acronym stands for!

Slide 37 B

Bathe or Shower soon after coming indoors!

Slide 38 L

Look for Ticks & Rashes!

Slide 39 A

Apply Repellents!

Slide 40 S

Safeguard your yard!

Safeguard yourself!

Slide 41 T

Treat your pets!

Slide 42 REVIEW

1. How does a tick give you Lyme disease?
2. Can you catch Lyme disease from a friend?
3. Who should you ask to remove a tick if one is found on you?

Slide 43 Congratulations

Slide 44 Be a Lyme fighter!

Together, we can

Slide 45 Additional Information

Slide 46 Additional Information continues.

Slide 47 Questions

Tick Checks

Students can practice checking for ticks during a physical education activity, such as a stretching exercise. “Reach down, touch your toes, and hold for 15 seconds. While you’re touching your toes, practice checking for ticks! Look around your legs, ankles, and shoes for any ticks.”

Students can practice checking for ticks after returning to class from recess. “When you line up to return to class, we’re going to practice checking for ticks. Look behind your knees, under your arms, and around your ankles. Also, feel behind your ears. Ask a friend or classmate to check your back for you.”

Drawing Activity

Students draw their backyard or favorite outdoor space. Then students trade their drawings with a classmate and identify places in the drawing where ticks might be found. (Recall that ticks are common in shaded, outdoor areas with grass, shrubs, rocks, logs, and fallen leaves.) Notify students prior to the activity that other students may review or mark their drawings. This activity can be modified if sharing or exchanging drawings is not possible or desired.

Creative Writing Activity

Prompt #1: Students write about what it would be like to be a tick – where they live, what they eat, and where they go.

Prompt #2: Students write about a secret power that would keep ticks from biting them.

Schoolyard Tick Walk: Walk around the schoolyard or playground with your students. Ask students to point out safe places to play versus where ticks might be. Focus on areas.

Where the schoolyard might border the woods or where there may be longer grasses or weeds.
After the schoolyard tour, discuss safe places to play and walk to school.

Kahoot or Jeopardy! - excellent ways to review materials to promote retention.

Thank for participating in the BLAST Lyme Disease Prevention Program

Your feedback helps us all grow. Thanks in advance for your cooperation.

<https://forms.office.com/g/ZzrNKYSJzJ>