**Tick Tag**

**Directions**

This activity is intended for grades 6 – 8.

Choose 1 student to be the pathogen (tagger), and 1 student to be the antibodies (unfreezers); the rest of the students will be cells. The taggers will run around to tag the cells, and if a cell is tagged, then they sit down and wait for an antibody (unfreezer) to come rescue them. The antibodies carry around a list of questions to ask the tagged cells. If the infected cells answer correctly, then they join the antibodies in a conga line to help the other cells. If they answer incorrectly, then they join the disease (taggers) and try to tag other cells.

In the end, when there are no more cells, whichever team (pathogen or antibody) has the most people, wins. Multiple rounds can be played as time allows. Select new students to be the tagger and unfreezer. Make sure the new unfreezer starts where the last one left off in the question list to avoid repeating.

**Supplies**

🞎 Questions

**Learning Objectives**

* Knowledge of pathogens ticks can transmit
* Knowledge of the transmission cycle
* Maine Learning Results in Health Education: A3, A4

This activity was created by 7th grade students from King Middle School in Portland, Maine.

**Tick Tag Questions**

1. What is the scientific name for the bacteria that causes Lyme disease?
   1. *Borrelia burgdorferi*
2. How long does it take for a tick to transmit the bacteria that can cause Lyme disease?
   1. 24-48 hours
3. Which is smaller: Bacteria or virus?
   1. Virus
4. What type of pathogen is babesiosis caused by?
   1. A parasite
5. True or False: Lyme can be transmitted from person to person.
   1. False
6. What type of pathogen is anaplasmosis caused by?
   1. Bacteria
7. Which type of tick is about the size of a grape after feeding?
   1. Dog tick
8. True or False: You can’t get bitten by a tick in the winter.
   1. False
9. During which stage in the lifecycle could deer ticks be approximately the size of a poppy seed?
   1. Nymph
10. How do ticks survive in each stage of their life?
    1. By feeding on blood
11. How long can a tick spread a pathogen once it is infected?
    1. Throughout its whole life
12. Is Lyme disease caused by a virus or bacteria?
    1. Bacteria

1. During which seasons is the risk of human infection the greatest?
   1. Summer
2. During which stage in the lifecycle could deer ticks be approximately the size of a sesame seed?
   1. Adult
3. Name one disease in Maine caused by a tick other than Lyme disease.
   1. Anaplasmosis, babesiosis, Powassan, or *Borrelia miyamotoi*
4. What color is on a dog tick’s scutum?
   1. White
5. What is the term for a tick in the transmission cycle?
   1. Vector
6. What is the name for a living animal or plant that provides food or shelter for another?
   1. Host
7. What type of habitat do deer ticks prefer?
   1. Woods
8. What is the shape of Lyme bacteria?
   1. Corkscrew