



Tickborne Disease 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 pathogens 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.



Tickborne Disease Tag Questions

1. What is the scientific name for the bacteria that causes Lyme disease?
 - a. *Borrelia burgdorferi*
2. How long does it take for a tick to transmit the bacteria that can cause Lyme disease?
 - a. 24-48 hours
3. Which is smaller: Bacteria or virus?
 - a. Virus
4. What pathogens do dog ticks transmit to people in Maine?
 - a. None, they are just a pest species in Maine
5. True or False: Lyme can be transmitted from person to person.
 - a. False
6. What is the most common symptom of Lyme disease?
 - a. The bull's eye rash
7. Will the bull's eye rash only show up where a tick bit you?
 - a. No. The rash can also show up in other places on your body
8. True or False: You can't get bitten by a tick in the winter.
 - a. False
9. During which stage in the lifecycle could deer ticks be approximately the size of a poppy seed?
 - a. Nymph
10. What do ticks need to move on to the next stage?
 - a. Blood
11. How long can a tick spread a pathogen once it is infected?
 - a. Throughout its whole life
12. Is Lyme disease caused by a virus or bacteria?
 - a. Bacteria
13. During which seasons is the risk of human infection the greatest?
 - a. Summer

14. During which stage in the lifecycle could deer ticks be approximately the size of a sesame seed?
 - a. Adult
15. Name one disease in Maine caused by a tick other than Lyme disease.
 - a. Anaplasmosis, babesiosis, Powassan, or *Borrelia miyamotoi*
16. What color is on a dog tick's scutum?
 - a. White
17. What is the term for a tick in the transmission cycle?
 - a. Vector
18. What is the name for a living animal or plant that provides food or shelter for another?
 - a. Host
19. What type of habitat do deer ticks prefer?
 - a. Woods
20. What is the shape of Lyme bacteria?
 - a. Corkscrew
21. What color clothing should you wear to make ticks easier to see?
 - a. Light-colored clothing (khaki, white, etc.)
22. What type of repellent is approved for use on clothing?
 - a. Permethrin
23. You should make sure that your repellent is approved by which group?
 - a. EPA – Environmental Protection Agency
24. What type of clothing will protect your arms and legs from ticks?
 - a. Long pants and long-sleeved shirts
25. What can you do to keep ticks from crawling up your pant legs?
 - a. Tuck pants into socks
26. What should you do frequently while outdoors, after you come inside, and at the end of every day?
 - a. A tick check

27. What should you do with your clothes when you come inside to kill any ticks that may be crawling on them?
 - a. Put in the dryer for 10 minutes on high heat
28. What should you do with a tick after you remove it?
 - a. Put it in rubbing alcohol to kill it or put in sealed plastic bag
29. Should you use petroleum jelly, a hot match, nail polish, or other products to remove a tick?
 - a. No
30. What is the best way to remove a tick?
 - a. Use a tick spoon or tweezers to gently pull the tick out of the skin