



BC Agriculture in the Classroom Foundation

Hay, Have You Herd?

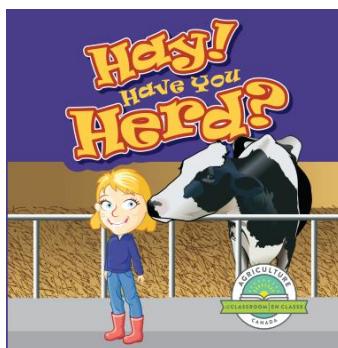
Biosecurity Tag

Students will learn about how pathogens are spread and the biosecurity measures which can be taken to control disease outbreaks in farm settings. Through active, experiential play activities, students will engage with the concepts of pathogen growth, veterinary intervention, and biosecurity protocol.

Subject Levels/ Suggested Grade

K-5 Physical and Health Education

K-4 Science



Written by Amy Bawtinheimer, Education Specialist (2025-2026)

Adaptation of a lesson found in: [Biosecurity - Educational Activity Kit - Canada Agriculture Museum](#)

Grade and Subject	Curricular Competencies	Content Connections
Physical and Health Education K-5	<p>Develop and demonstrate a variety of fundamental movement skills in a variety of physical activities and environments</p> <p>Develop and demonstrate safety, fair play, and leadership in physical activities</p> <p>Participate daily in physical activity at moderate to vigorous intensity levels Identify opportunities to be physically active at school, at home, and in the community</p> <p>Develop and demonstrate respectful behaviour when participating in activities with others</p> <p>Explain how participation in outdoor activities supports connections with the community and environment</p>	<ul style="list-style-type: none"> • Relationships between food, hydration and health • Practices that promote health and well-being, including those relating to physical activity, nutrition, and illness prevention • Proper technique for fundamental movement skills, including non locomotor, locomotor, and manipulative skills • How to participate in different types of physical activities, including individual and dual activities, rhythmic activities, and games
Science K-4	<p>Demonstrate curiosity and a sense of wonder about the world</p> <p>Observe and make predictions about objects and events in familiar contexts</p> <p>Ask questions about familiar objects and events</p> <p>Experience and interpret the local environment</p> <p>Share observations and ideas orally</p> <p>Communicate observations and ideas using oral or written language, drawing or role play</p>	<ul style="list-style-type: none"> • Basic needs of plants and animals • Sensing and responding to humans, environment and animals

Teacher Background

Biosecurity refers to the “practices that prevent or mitigate disease from entering, spreading within, or being released from operations that may contain livestock” (Hay! Have You Herd? 2026).

Biosecurity is an important practice in place in farms across BC and Canada to protect livestock and humans from spreading contagious diseases, and to ensure our food supply chain maintains a high level of quality and food safety.

In BC, biosecurity measures are found on all commercial farming operations in some form. Farms with some of the strictest measures in place include the poultry, dairy, and pork industries.

Biosecurity measures can be as simple as washing hands before entering and leaving a facility, to more complex measures including wearing personal protective equipment (PPE), using chemical cleaning agents, and veterinary health care. All biosecurity measures are designed to keep animals and humans healthy on farms across BC.

In this activity, students will learn about the process of infectious spread through a simulation game of tag, with variables added throughout gameplay to simulate the controls that can help prevent the spread of infection using biosecurity processes. Depending on the age and learning needs of your students, you can increase or decrease the game play length and difficulty in controlling contamination. More detailed instructions are included in the Method section of this resource.

After the game is played, students will be asked to reflect on their experiences to connect their learning back to the “Hay! Have You Herd?” story and the concept of biosecurity. Primary students may benefit from giving their answers to the reflection questions in an oral setting, instead of written responses. A worksheet sample with completed questions has been provided at the end of this resource.

This lesson series is designed to accompany the storybook “Hay! Have You Herd?”

Materials

- “Hay Have You Herd” storybook
- Open space for playing tag, such as gym, field, or multipurpose school area
- Stopwatch or timer
- Optional tag materials:
 - Pinnie, coloured signs, or other marker for “infected” students in tag
 - Chalk, tape, or other materials to mark boundaries for the tag game play space
- Student handouts:
 - Biosecurity Tag Reflection worksheet

Procedure

Activity 1 – Biosecurity Brainstorm

1. Read the story “Hay! Have You Herd?” as a class.
2. As a class, make a list of how biosecurity measures are used in the story, and ask students to explain how each measure can help keep animals and people safe from illness. This could be done through individual, paired, or class brainstorming sessions. Explain to students that they are going to test some of these methods in a game to explore how we can keep diseases from spreading using these biosecurity measures.

Activity 2 – Biosecurity Tag

1. Gather all students in an open space for playing tag. If desired, mark out the “barn” area with chalk or tape to create clear barrier lines. Remind students about safe movement of their bodies while playing tag, including ground rules of no hitting, shoving, or other unsafe behavior towards other students, and staying within the running space boundaries.
2. Explain to students that they are going to pretend to be one of the farm animals from “Hay Have You Herd” living in a big barn space. If desired, have students imitate movement or sounds produced by their animal (for example, if chicken is the chosen animal, students could flap their arms like wings and cluck while they run around the tag space).
3. Designate one student to be “it”. This student will be representing a sick animal in the herd or flock of students. Their job is to tag and “infect” as many students as possible. If desired, this student can wear a pinnie or other marker to show they are the starting point of the infection.
4. Begin the game of tag. During play, any person who is tagged by “it” becomes an infected animal as well and must also turn into a tagger. After five minutes, pause gameplay and take a count of how many students have been infected.
5. Repeat the game as desired, choosing a new student to be “it” each round.
6. Have students reflect on their experiences using the Biosecurity Tag reflection sheet at the end of this package.

Activity 3 – Biosecurity Tag Variations

1. After playing a few basic rounds of tag and giving time for personal reflection, gather the students back into one big group for further instruction. Using examples from “Hay Have You Herd”, ask students how they think we could put limits on the infection spreading through the herd, referring to the examples from the earlier brainstorming session. If desired, record student responses.
2. The following ideas are suggestions for highlighting different areas of biosecurity controls in BC farms. Try using these methods one at a time during rounds of tag, or in combination!
 - a. Call the Veterinarian! – in this variation, choose one student to be the infected animal, and one student to be the veterinarian. The veterinarian cannot be tagged and become infected, but they can tag infected animals to reverse the infection. There can be more than one veterinarian if desired.
 - b. Confined Quarters – in this variation, shrink the playing area to one half or even one quarter of the original space. Students should notice that infection spreads much quicker when animals are closer together!
 - c. Quarantine – in this variation, the infected animal is placed in a “quarantine” and is unable to move from a smaller space within the tag area. This space can be physically marked off with chalk or tape if desired to keep the “it” student boundaries clear. Have the “it” student try to tag other students from within their quarantine zone.

Extension Activities

- Challenge students to come up with another variation for the tag game to explore more biosecurity control methods.
- Have a local farmer or agricultural worker present to the class on ways they use biosecurity on their farming operation.
- Take a virtual farm tour of a farm that would not allow in person visits due to biosecurity protocols.
- Explore additional biosecurity game activities in the [*Biosecurity - Educational Activity Kit - Canada Agriculture Museum*](#)

Biosecurity Tag Reflection

Name: _____

Date: _____

What activity did we do today? _____

What movements did we make with our bodies? _____

What was the goal if you were "it"? _____

What was the goal if you were not "it"? _____

What happened if you were tagged by "it"? _____

How did we change the game to keep more people from being tagged?

Why do you think these changes helped keep the "animals" safe?

What are some ways you can help keep animals and people in your life from getting sick?

Biosecurity Tag Reflection Sample

Name: _____

Date: _____

What activity did we do today? _____ biosecurity tag _____

What movements did we make with our bodies? ___running, moving like farm animals___

What was the goal if you were "it"? _____to tag others and infect them_____

What was the goal if you were not "it"? _____to stay away from "it" to not get sick!_____

What happened if you were tagged by "it"? ___we became "sick" and had to tag others___

How did we change the game to keep more people from being tagged?

____Answers will vary depending on variations used, but may include "having a vet tag

people to make them healthy again" or "keeping it in a smaller space" _____

Why do you think these changes helped keep the "animals" safe?

___It was harder for "it" to tag others, and they stayed healthy._____

What are some ways you can help keep animals and people in your life from getting sick?

____Answers will vary, but may include washing hands, staying away from others when sick,

seeing a doctor, etc. _____