# PROTECTING YOUR HERD/FLOCK BIOSECURITY TIP SHEET

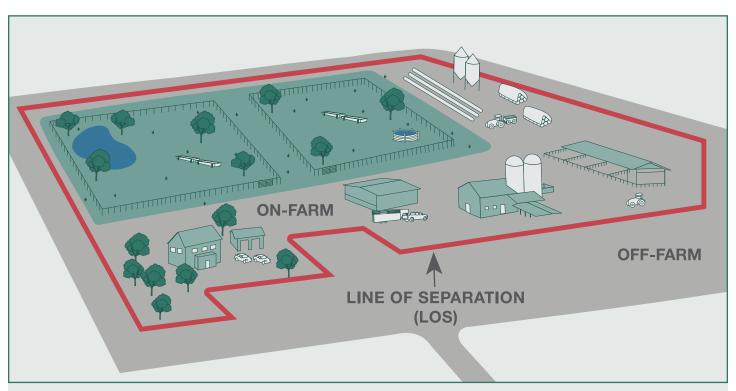


Items moving on and off your farm or ranch can bring disease. Biosecurity actions can protect your animals from disease. Limiting entry to your operation can protect your herd/flock. Start by filling out Step 1: Movement Risks and Biosecurity available at: <a href="mailto:cfsph.iastate.edu/biosecurity">cfsph.iastate.edu/biosecurity</a>. This document lists movements that could put your animals at risk.

One way to protect your livestock is to separate on-farm from off-farm movements. Think about ways to put layers of protection between off-farm risks and your animals. Animals raised indoors might have more layers of protection than those raised outdoors.

Picture your operation or each animal building as a "castle" with a "moat" around it. The "moat" is a line of separation (LOS) between off-farm movements and on-farm animals. Entry to the animal areas is only through "drawbridges" or access points. Entry is controlled by the people on the farm.

How many drawbridges, or access points, do you need? The fewer there are, the easier it is to control access. This is one step in preventing disease entry. Even in modern times, the concepts from medieval days can help protect animals in our care.

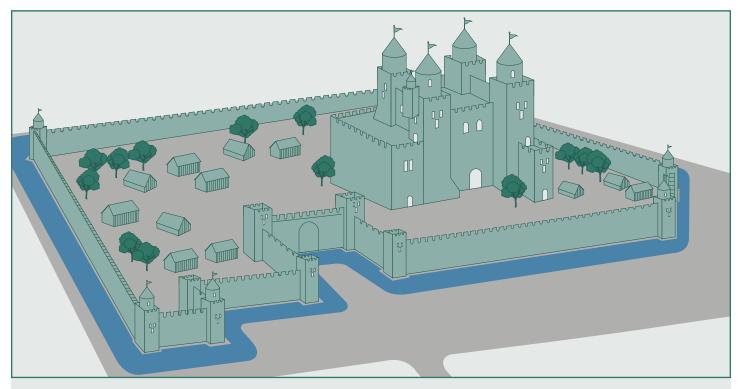


On-farm movements can be separated from off-farm movements by a line of separation (LOS). Source: CFSPH, Iowa State University

### LIMIT ACCESS TO ANIMALS WITH A LINE OF SEPARATION (LOS): "THE MOAT"

The moat, or Line of Separation (LOS), divides off-farm movements from animal areas.

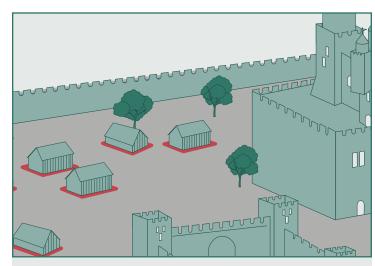
- The on-farm area (inside the LOS) should include the animals and any supplies, feed, vehicles, or equipment that have to be taken into animal areas.
- The LOS might be around the entire operation, just the animal barns, or something in between.
- Many options exist based on the layout of your farm.
- Using fences or gates is one way to mark an LOS.



The farm is a castle with walls around the perimeter. The moat is outside the walls and serves as the line of separation (LOS). Source: CFSPH, Iowa State University

### SETTING UP A LINE OF SEPARATION (LOS)

- Think about daily tasks of feeding, watering, cleaning pens, or equipment used in animal areas.
- Plan drive paths so vehicles or equipment that go into animal areas do not carry germs onto your farm.
  - Cleaning and disinfecting vehicles is hard work.
  - Find ways to care for animals without bringing disease into their areas.
- Indoor raised animals: The LOS might be the walls
  of the buildings. The doors are the "drawbridges".
  An extra layer of protection, called a Perimeter
  Buffer Area, could go around all animal barns or the
  entire property, like the "moat".
- Outdoor raised animals: The LOS might be the entire property if tractors, hay, silage or other outdoor feeds need to be moved to the animals.



The LOS is around the animal barns. Source: CFSPH, Iowa State University

Protecting your property helps keep diseases away from your animals and people.

- Post signs that say where people can and cannot go, in languages understood by frequent visitors.
- Provide a parking area for personnel and visitors. The parking area should be located outside the Line of Separation and away from animal areas.
- Install outdoor lighting. A well-lit perimeter discourages trespassers and wildlife.
- Keep fences in good repair. Fencing can be a barrier against wildlife, other unwanted animals, and people. To keep deer out, fences should be at least 8 feet high.
- Create a map of your farm/ranch. Label where animals are kept (e.g., pastures, barns). Label delivery areas for feed
  and supplies. Label pickup areas for dead animals, manure, and compost. Label shut offs for gas, fuel, propane,
  and water. Also include any nearby animals, facilities, and fields. This may be useful to emergency personnel in the
  event of a natural disaster or disease outbreak.



Biosecurity sign stating "Cross only at biosecure entry point."

Source: CFSPH, Iowa State University



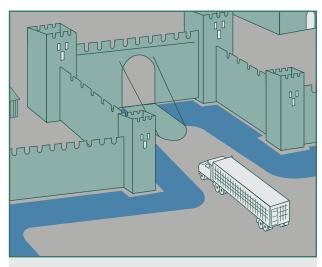
Biosecurity sign stating "Stop, biosecure entry point. Clean boots & clothing required."

Source: CFSPH, lowa State University

## CROSSING THE LINE OF SEPARATION: "THE DRAWBRIDGE"

Mark points of entry to the farm or animal areas with signs. Making sure vehicles and people follow biosecurity steps before crossing the LOS can stop disease entry. This may include:

- Wearing clean boots or shoe covers.
- Wearing clean clothing or coveralls.
- Showering and wearing clothing and boots provided by the farm.
- Washing hands before and after animal handling and/or wearing gloves.
- Signing an entry log as a record of who comes to your farm.
- Allowing only clean vehicles or equipment to enter. In a disease outbreak, they should also be disinfected.



The drawbridge is lowered to let a vehicle cross the moat, or line of separation.

Source: CFSPH, Iowa State University

### ASSESSMENT CHECKLIST

Use the following checklist to determine areas where you are doing well and others that need to improve.

YES	NO	After answering, pick one or two "No" answers and make an improvement plan with the resources below.
		Can you restrict entry of people and vehicles to your farm/ranch?
		Are signs posted at the entry points with biosecurity information?
		Do you have a parking area for vehicles away from animal areas?

### **MORE RESOURCES:**

Checklist for Using a Line of Separation. U.S. Department of Agriculture (USDA).

Line of Separation. Healthy Farms Healthy Agriculture.

Rethink Biosecurity. University of Minnesota Extension.

Secure Food Supply Plans: Biosecurity Entry Signs.

- Secure Beef.
- Secure Milk.
- Secure Pork.
- Secure Poultry.
- Secure Sheep and Wool.

### **ACKNOWLEDGMENTS**

Development of this material was made possible through grants provided to the Center for Food Security and Public Health at Iowa State University, College of Veterinary Medicine from the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service through the National Animal Disease Preparedness and Response Program (NADPRP) and National Institute of Food and Agriculture, under award number AWD-021794-00001 through the North Central Region SARE program under project number ENC19-176. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the USDA. Iowa State University is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to extension iastate.edu/diversity/ext.