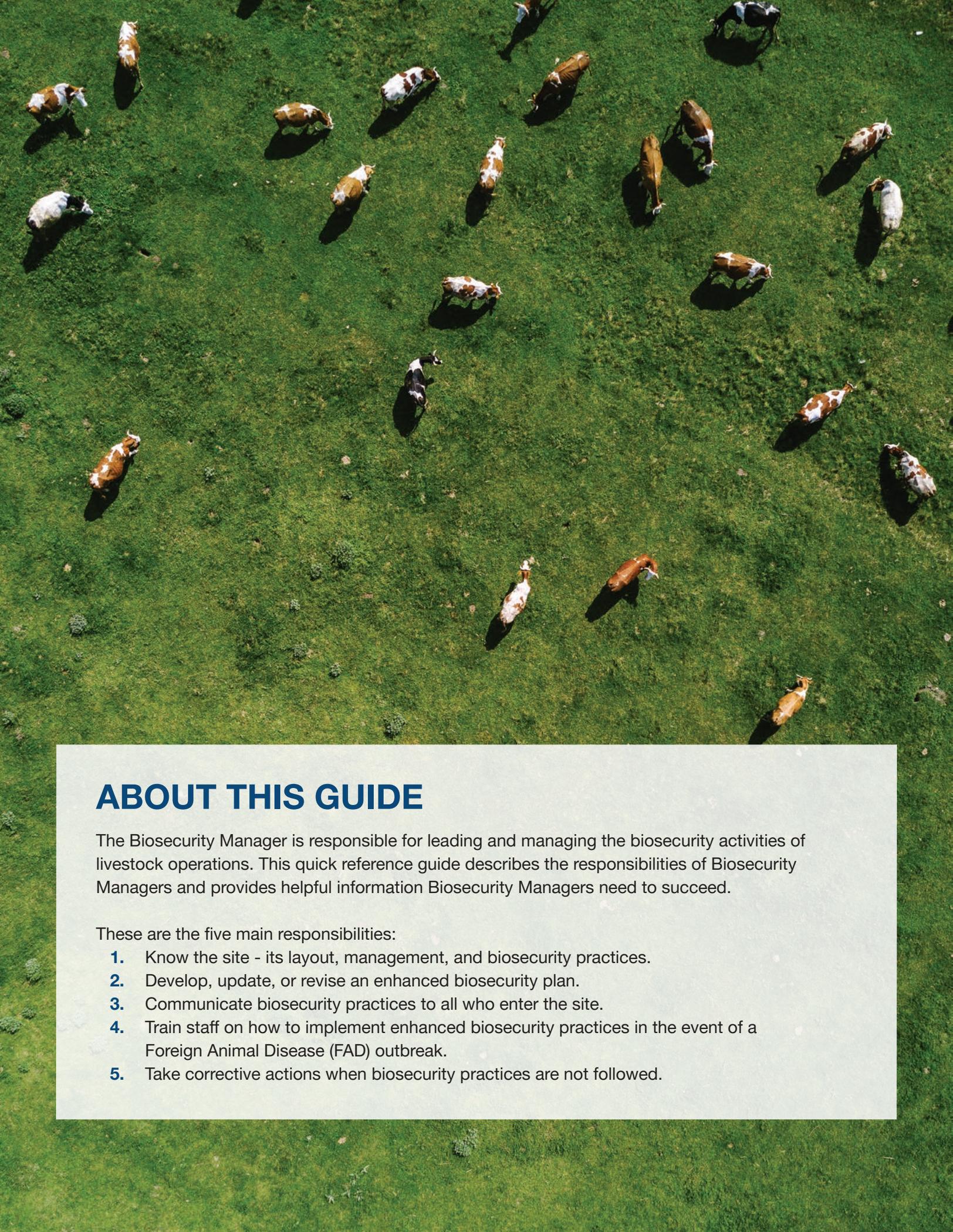




BIOSECURITY MANAGER GUIDE

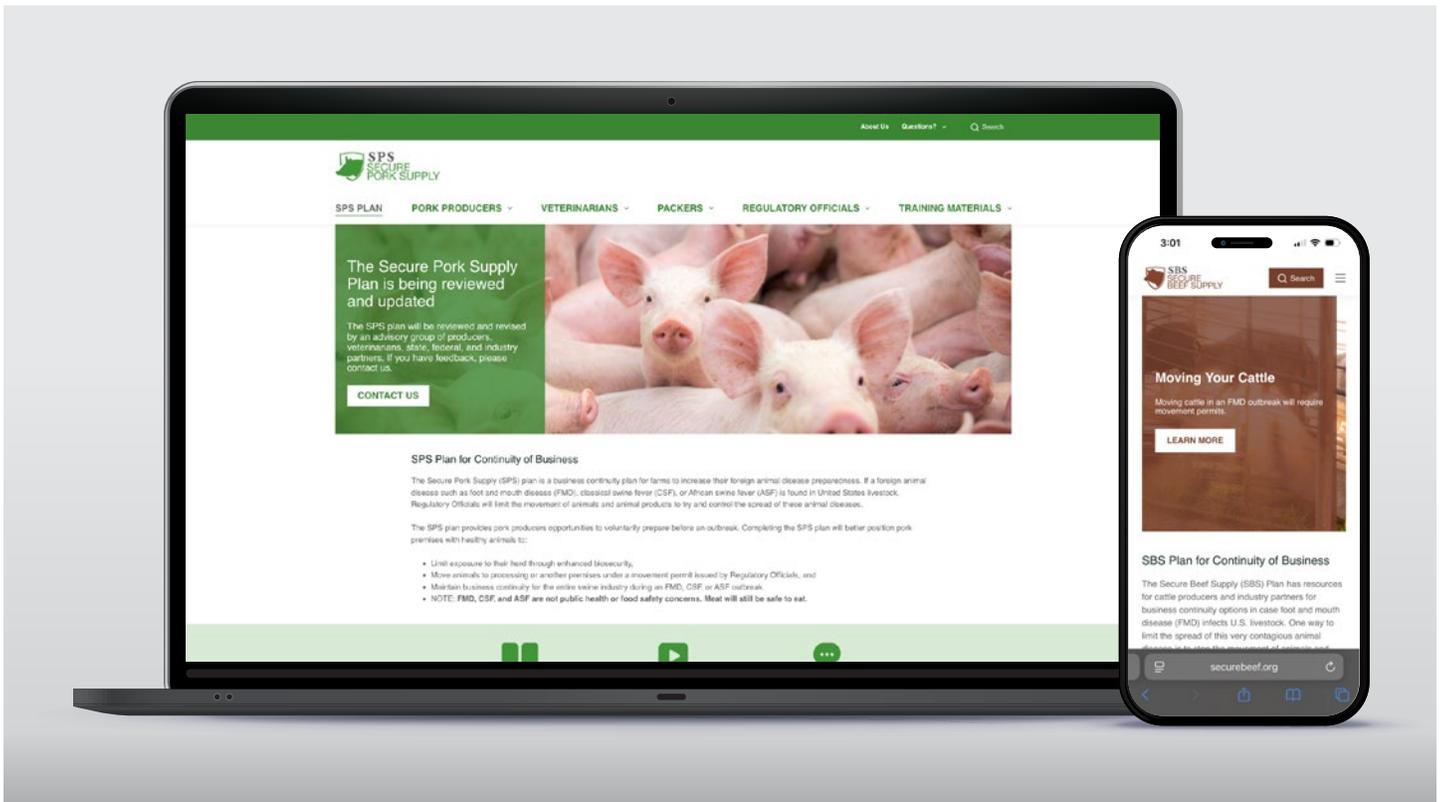
An aerial photograph showing a herd of approximately 20 cows of various breeds (including brown and white, black and white, and solid brown) grazing in a lush green field. The cows are scattered across the frame, and their shadows are cast on the grass. The image is used as a background for the text overlay.

ABOUT THIS GUIDE

The Biosecurity Manager is responsible for leading and managing the biosecurity activities of livestock operations. This quick reference guide describes the responsibilities of Biosecurity Managers and provides helpful information Biosecurity Managers need to succeed.

These are the five main responsibilities:

1. Know the site - its layout, management, and biosecurity practices.
2. Develop, update, or revise an enhanced biosecurity plan.
3. Communicate biosecurity practices to all who enter the site.
4. Train staff on how to implement enhanced biosecurity practices in the event of a Foreign Animal Disease (FAD) outbreak.
5. Take corrective actions when biosecurity practices are not followed.



The **Secure Food Supply (SFS) Plans** for dairy, beef, sheep, swine, and poultry describe these responsibilities in more detail. These plans help livestock producers prepare for and respond to Foreign Animal (FAD) disease outbreaks. It is essential that all operations prepare for an FAD, regardless of size, location, type of production (indoor, outdoor, back yard), or use of public lands for grazing.

The SFS plans guide producers on how to prepare for an outbreak by developing **enhanced biosecurity** practices. Enhanced biosecurity measures build on **everyday biosecurity** practices and are critical in keeping FADs off operations and preventing them from spreading once they occur. Producers with an enhanced biosecurity plan may also have an advantage in obtaining permits to move animals off their site.



RESPONSIBILITIES OF A BIOSECURITY MANAGER

The SFS Plans describe the Biosecurity Manager as the person responsible for developing and updating a site-specific enhanced biosecurity plan. The Biosecurity Manager can be an owner, manager, veterinarian, or employee on-site. If the Biosecurity Manager is not a veterinarian, they should work with their veterinarian and/or other SFS biosecurity experts when writing their site-specific enhanced biosecurity plan.

The five primary responsibilities of the Biosecurity Manager are:

1. KNOW THE SITE - ITS LAYOUT, MANAGEMENT, AND BIOSECURITY PRACTICES

SITE LAYOUT AND MANAGEMENT

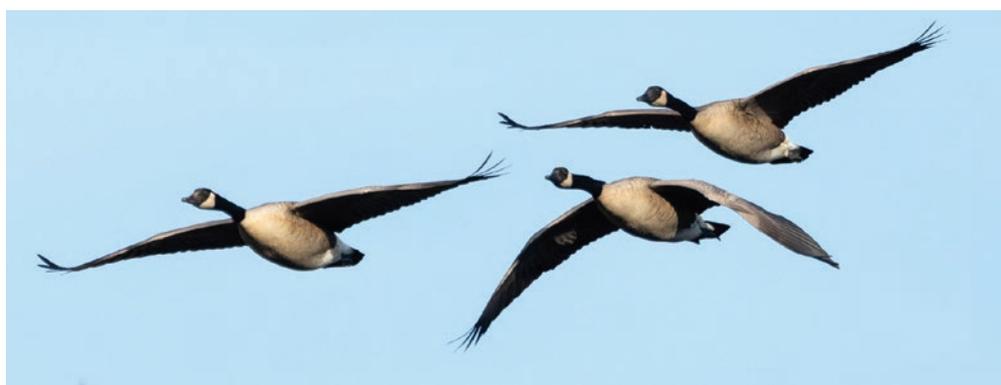
The Biosecurity Manager must be familiar with the layout and management of the site, including where animals are housed and the movement of vehicles, equipment, animals, and products on, off, and within the operation.

Creating a premises map resource is valuable for this purpose. Find resources on the CFSPH and Secure Food Supply websites.

BIOSECURITY PRACTICES

Biosecurity, defined in the SFS plans, refers to management practices implemented at different levels to keep diseases off the operation.

Knowing how diseases spread helps you prevent them. Diseases can be spread by direct contact, indirect contact, through the air, food, and vectors like flies and ticks, birds, rodents, and other animals, including pets and wildlife.



You can think of developing a biosecurity plan as a stair-step approach, where you start with small steps and progress over time. **Everyday biosecurity** (also known as daily biosecurity) is a set of management practices that protect animals and people from exposure to disease. Everyday biosecurity is meant to be used routinely to prevent common endemic diseases. It is the foundation of biosecurity. Enhanced biosecurity builds on that foundation.

WHERE ARE YOU AT WITH YOUR BIOSECURITY?

This three-step process, Step 1: Movement Risks and Biosecurity, Step 2: Self-Assessment Biosecurity Checklist, Step 3: Biosecurity Plan Template, is a simple way to start with the key everyday topics of biosecurity described. Conduct a self-assessment to help identify risk areas.

To learn more about the basics of biosecurity, practice designing a secure livestock operation. To customize a plan online using the different steps (1,2,3) and assessments, see the additional resources page.

To find the additional resources page, scan the QR code or visit [biosecurity-manager-toolkit/#resources](https://cfsph.iastate.edu/biosecurity-manager-toolkit/#resources).

cfsph.iastate.edu/

STEP 3: BIOSECURITY PLAN TEMPLATE – LIVESTOCK AND POULTRY

STEP 2: SELF-ASSESSMENT BIOSECURITY CHECKLIST – LIVESTOCK AND POULTRY

STEP 1: MOVEMENT RISKS AND BIOSECURITY

health of your animals. Biosecurity also protects is. plan should address all the ways disease could enter it. program. y assessment. ecklist.

This checklist points out biosecurity strengths (what you are doing well) and areas for improvement. Biosecurity actions can reduce the risk of disease-causing germs from entering, spreading, and exiting your farm/ranch. This helps keep animals healthy. Biosecurity actions can also protect people from zoonotic diseases from animals to humans.

BIOSECURITY PLANNING, MANAGING, AND TRAINING

Biosecurity plans do not have to be complex to work. A plan should address all the ways disease can enter from outside sources. Write down your operation and describe actions to prevent it. Use these 3 steps to get started. Step 1: Identify risks, manage biosecurity actions and train others about what is needed. Step 2: Fill out this checklist. Step 3: Use the biosecurity template to write your biosecurity plan. We have a Tip Sheet for each at: cfsph.iastate.edu/biosecurity.

Look through the questions below. Answer those that apply to your operation and ignore the rest.

PROTECTING YOUR HERD/FLOCK

Disease can enter from outside sources. Biosecurity actions can protect your animals from disease. Biosecurity actions can protect your animals from disease. Biosecurity actions can protect your animals from disease.

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	Can you limit entry of people and vehicles to your farm/ranch?
<input type="checkbox"/>	<input type="checkbox"/>	Are signs posted at the entry points with biosecurity information?
<input type="checkbox"/>	<input type="checkbox"/>	Do you have a parking area for vehicles away from animal areas?

ANIMAL HEALTH AND DISEASE MONITORING

Items moving on and off your farm/ranch can bring disease. Identifying movement risks can help you prevent them. Check the box that best describes how often each movement occurs. Are most of your checkmarks in the two left columns (lower risk)? Great! Fewer movements help keep disease away from your animals. Do you have items marked in the three right columns (higher risk)? Those need your attention first. Pick one or two to start. Find Biosecurity Tip Sheets (available at: cfsph.iastate.edu/biosecurity) to learn about changes you can make. Continue working on biosecurity with Step 2: Biosecurity checklist and Step 3: Biosecurity Plan template to write your biosecurity plan. These resources can help you protect your animals' health!

INPUTS/OUTPUTS	MOVEMENT	INCREASING LEVEL OF RISK → → → → →				
		NEVER	YEARLY	MONTHLY	WEEKLY	DAILY
Animals and Animal Products	Incoming animals/birds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Outgoing animals/birds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Semen/embryos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Milk, colostrum, eggs (whole shell, liquid, hatching)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



2. DEVELOP, UPDATE, OR REVISE AN ENHANCED BIOSECURITY PLAN

Enhanced biosecurity refers to practices that align with the SFS plan specific to the species on that operation, and are meant to be used during an outbreak.

Developing or updating a written enhanced biosecurity plan before an FAD outbreak will help your operation stay in business and keep animals healthy during an outbreak.

Each SFS website has one or more enhanced biosecurity templates (see the Additional Resources section). These are good places to start when developing or updating your written plan.





TRAINING AND BUILDING A TEAM TO HELP WRITE/EXECUTE AN ENHANCED BIOSECURITY PLAN:



Choose a staff member to oversee and coordinate the process.



Make sure staff cooperate with the team.



Ensure good working relationships.

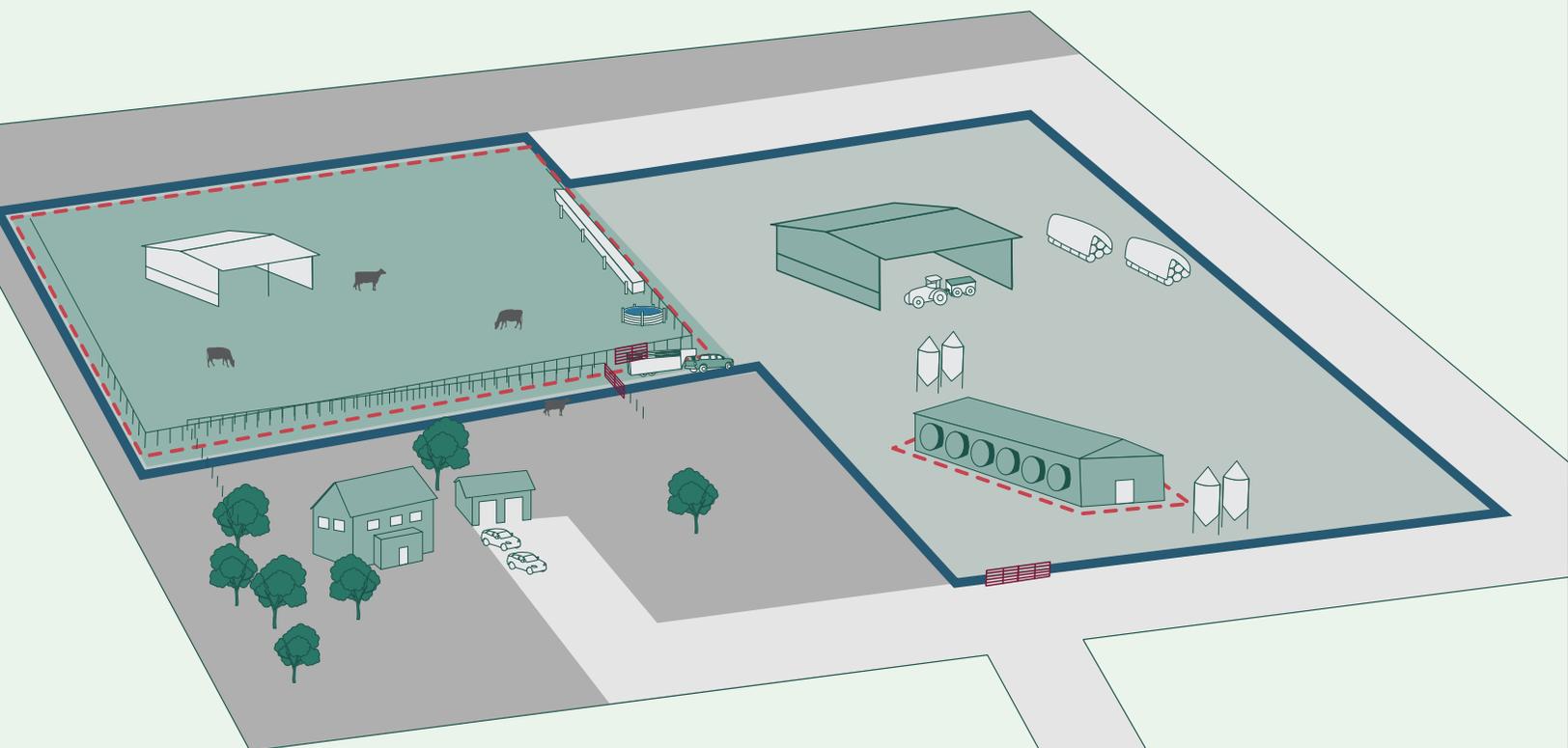
If your operation has multiple species on the site, you may need various checklists and/or templates to write your enhanced biosecurity plan. Suppose an operation has multiple sites with animals. In that case, each location will need to have its own written enhanced biosecurity plan defining the scope of the operation, and copies of the plan should be readily available to people who enter the site frequently.

Biosecurity Managers should review the biosecurity plan at least annually and whenever the site goes through a change that affects biosecurity (expands, adds a new aspect of the business, and/or makes changes). Biosecurity Managers should also prepare to have their biosecurity plan reviewed by their site's veterinarian and state animal health agency. Specific requirements vary by state. Find more information about your species and your state's requirements on the SFS websites and from your state Department of Agriculture or Board of Animal Health.

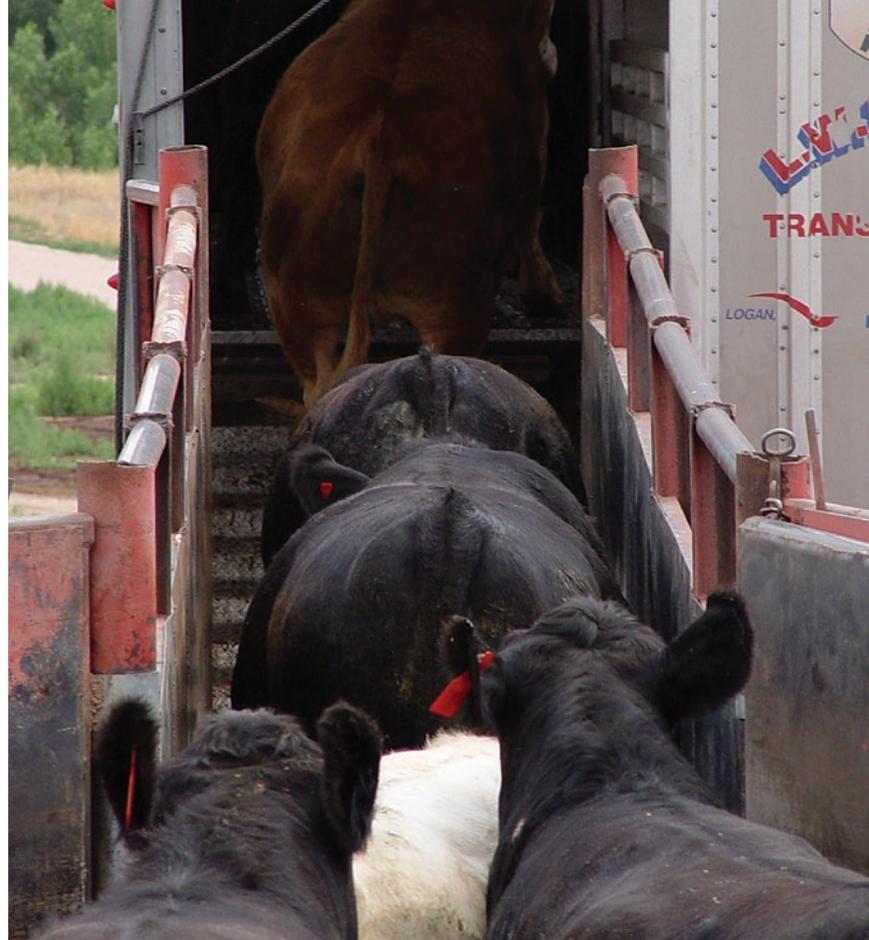
The following topics expand on everyday biosecurity practices and are examples of concepts that must be addressed in the operation's enhanced biosecurity plan. Visit the SFS website for specific requirements for the species on your operation. Your veterinarian, industry groups, and regulatory officials can be a good source of information besides the SFS Plan websites.

The enhanced biosecurity plan should:

- **Include a map of the site labeling important aspects of biosecurity**, consisting of the site entry, Line of Separation (LOS), Perimeter Buffer Area (PBA) if applicable, access points through the LOS and/or PBA, Cleaning and Disinfection (C&D) station, designated parking, and carcass disposal/pickup locations, as well as routes for vehicle and carcass movements.
- **Describe how you protect animals on your operation through lines or layers of biosecurity.** Mark the lines or layers on the map and within the operation. A LOS is required for all sites; this is a control boundary meant to prevent movement of an FAD into areas where susceptible animals could be exposed. For some operations (including poultry housed indoors), a PBA is also required; this is an outer control boundary (surrounding the LOS) meant to limit the entry of an FAD near animal housing before additional biosecurity practices must be followed to cross the LOS. More resources are available on determining the best location for the LOS and PBA (see the Additional Resources section).



— PERIMETER BUFFER AREA
- - - LINE OF SEPARATION

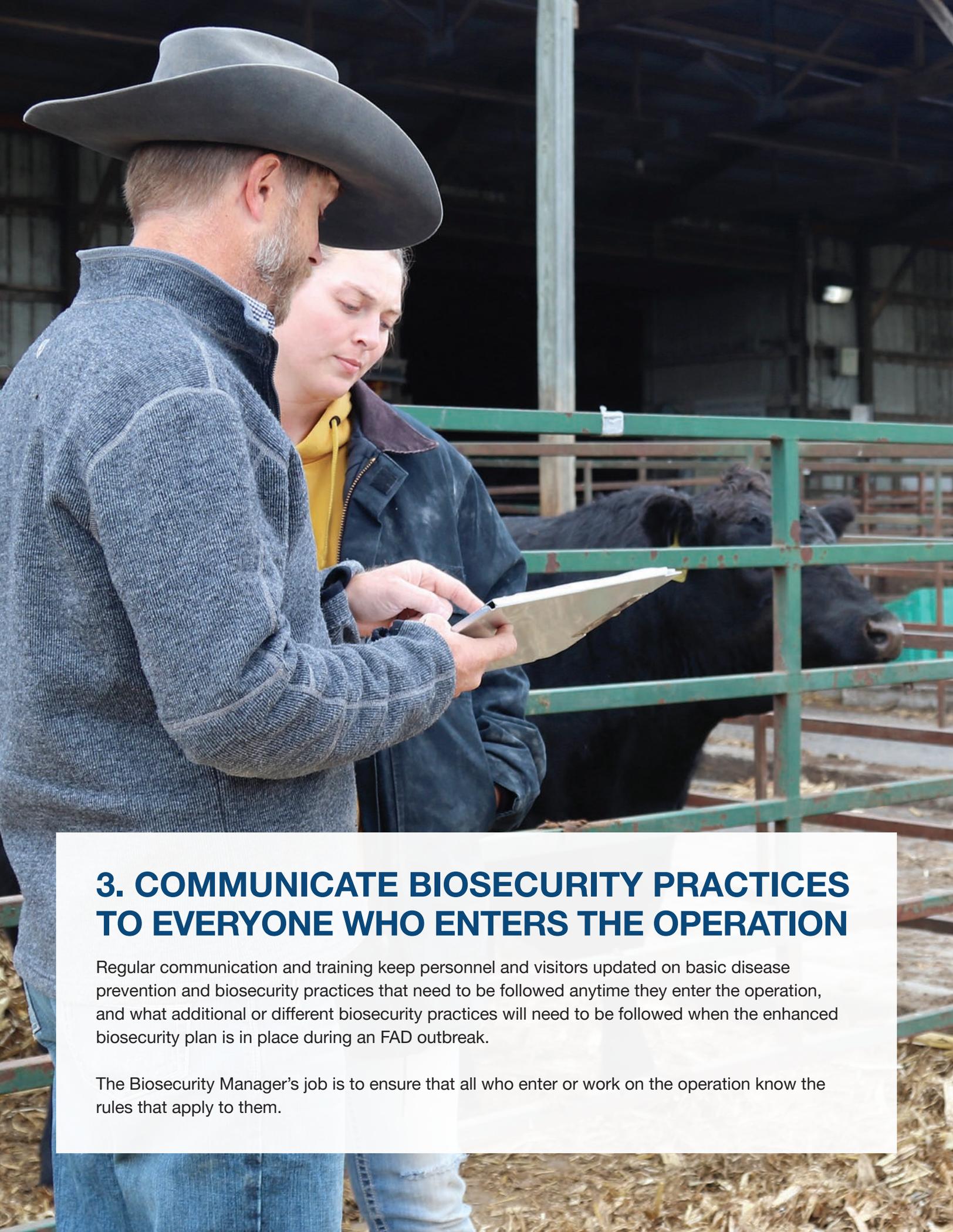


- **Describe how you will protect animal movements that need to occur on the farm.** Determine how people, vehicles, equipment, and supplies may safely cross one or more lines or layers of biosecurity. This includes animals, feed, manure, carcasses, animal transport vehicles, and animal products such as milk, semen, embryos, and wool. These movements should occur at a designated access (entry) point for that type of entry. Depending on what is crossing, wearing personal protective equipment such as clean boots and clothing, cleaning, and disinfecting items or vehicles, and/or one-way traffic flow may also be required. Additional resources include Standard Operating Procedures (SOPs) for key movements:
 - SOPs for Personnel Entry/Exit
 - SOP for Establishing Line of Separation and Access Point
- **Describe the cleaning and disinfection (C&D) process** that removes and kills disease-causing agents on equipment and surfaces. Additional resources include an SOP for establishing and operating the cleaning and disinfection station.
- **Describe how to control rodents, vectors (like flies or ticks), birds, wildlife, and other animals,** preventing them from having contact with the animals and bringing disease onto the operation.
- **Describe how you will provide the necessary training** on all practices included in the enhanced biosecurity plan to those working on or visiting your operation.

To identify where access to animals will be controlled, to better understand C&D principles for animal settings, to learn about specific SOPs for a C&D station, and for more information on how to control rodents, vectors, birds, wildlife, and other animals, please go to the additional resources page.

To find the additional resources page, scan the QR code or visit cfsph.iastate.edu/biosecurity-manager-toolkit/#resources.





3. COMMUNICATE BIOSECURITY PRACTICES TO EVERYONE WHO ENTERS THE OPERATION

Regular communication and training keep personnel and visitors updated on basic disease prevention and biosecurity practices that need to be followed anytime they enter the operation, and what additional or different biosecurity practices will need to be followed when the enhanced biosecurity plan is in place during an FAD outbreak.

The Biosecurity Manager's job is to ensure that all who enter or work on the operation know the rules that apply to them.

COMMUNICATING BIOSECURITY PRACTICES



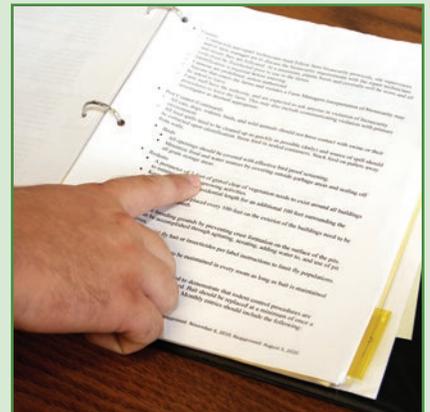
Site-dedicated personnel

- Train all employees when first hired on all basic and enhanced biosecurity practices within the operation's biosecurity plan. Encourage them to ask questions.
- Repeat training at least yearly or more often if changes to the biosecurity plan, operation management, or facility layout make it necessary to update sooner.
- Ensure the training is done in language(s) that everyone understands and that biosecurity practices are followed especially when entering and leaving the operation.
- Focus training on specific job areas and duties.
- Explain the consequences of not following biosecurity practices.
- Include contact information for the Biosecurity Manager and a secondary point of contact in case the Biosecurity Manager is unavailable.



Non-farm personnel and visitors

- Inform veterinarians, animal health workers like nutritionists and reproductive technicians, transporters, delivery drivers, family members, and other visitors who may come on-site about basic and enhanced biosecurity practices before or upon arrival.
- Limit entry of non-farm personnel during an outbreak to only those needed.



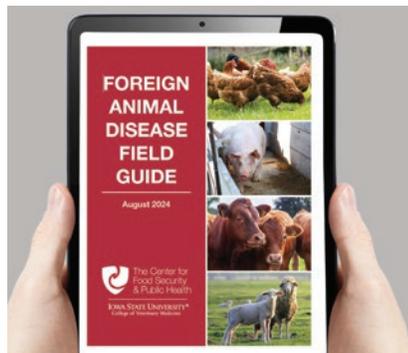
4. TRAIN STAFF ON HOW TO IMPLEMENT ENHANCED BIOSECURITY PRACTICES IN THE EVENT OF A FAD OUTBREAK

Training staff to implement enhanced biosecurity is essential in keeping FADs and emerging diseases off operations, preventing further spread on affected operations during an outbreak, and helping businesses to run smoothly.

When an operation is notified that they are in an animal disease Control Area, regulatory officials may require that all items in the operation's written enhanced biosecurity plan, and possibly others, be carried out before animal or product movement may be allowed. See the Control Areas and Continuity of Business video under the additional resources section.



The Biosecurity Manager should know where to go or who to contact at the state about FAD outbreaks and how they will get the information they need to apply the correct level of biosecurity. Your veterinarian, industry groups, and regulatory officials can be good sources of information; another good multi-species resource is the FAD Field Guide available under additional resources.



DOCUMENT ALL TRAINING

Each of the SFS Plan websites has a training section. Resources (including videos, recorded webinars, group training documentation forms, disease information, handouts, and more) are available for viewing or download.

Training and resources including videos are available from various organizations and industry groups, or the Biosecurity Manager may create their own based on the site-specific biosecurity plan.

To find the additional resources page, scan the QR code or visit cfsph.iastate.edu/biosecurity-manager-toolkit/#resources.



5. TAKE CORRECTIVE ACTIONS WHEN BIOSECURITY PRACTICES ARE NOT FOLLOWED

It's vital that **everyone** on the operation, including both site-dedicated and non-farm personnel, follow the biosecurity plan at the level required at all times.

Ensuring that biosecurity practices are followed requires:

- Daily monitoring and/or oversight of the operation's biosecurity practices by the Biosecurity Manager.
- Identifying trained point(s) of contact who can act on behalf of the Biosecurity Manager when they are not available.
- Regularly reviewing feedback on biosecurity practices and making changes when needed.
- Taking corrective actions when expectations are not met.

Biosecurity Managers should describe these practices during training and provide corrective actions consistent with other personnel management strategies. The Biosecurity Manager may require personnel not complying with the biosecurity plan to repeat training. They may also need coaching or remedial activities to show an understanding of how and why biosecurity practices are completed.

Biosecurity Managers should develop a work culture that rewards personnel for correctly and consistently following biosecurity practices.

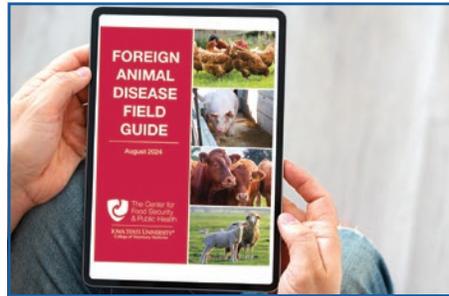


ADDITIONAL RESOURCES

This Biosecurity Manager Guide is part of a toolkit, including short videos to reinforce concepts, handouts with species-specific resources, and more.

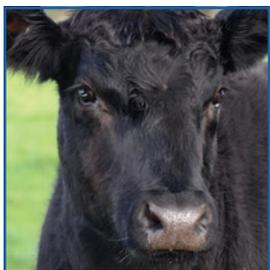
GENERAL

The “Biosecurity Your Way” website has great resources to help learn about the basics of biosecurity and to practice designing and customizing a plan. The FAD field guide presents possible signs of FADs to help you recognize and report them quickly. Healthy Farms, Healthy Agriculture (HFHA) is a great website with excellent biosecurity resources and FAD readiness videos.



SPECIES-SPECIFIC

If your farm has multiple species, you should review the handout for each species and decide which plan resources, or combination of resources, is most helpful for you in writing/updating, carrying out, and training on your biosecurity plan.



General and species-specific resources are available from various organizations and industry groups.

To find the additional resources page, scan the QR code or visit cfsph.iastate.edu/biosecurity-manager-toolkit/#resources.



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College of Veterinary Medicine

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