

STEP 2: SELF-ASSESSMENT BIOSECURITY CHECKLIST – SHEEP

Biosecurity measures are needed daily to help keep animals healthy. This checklist applies to:

- Operations of all sizes and management types that raise sheep on pasture or feedlot with or without other animals (e.g., pigs, sheep, goats, poultry, etc.).
- Operations with sheep that have had disease challenges (e.g., pneumonia caused by *Mannheimia haemolytica*, *Pasteurella multocida*, ovine progressive pneumonia; diarrhea caused by *E. coli*, *Salmonella*, *Clostridium perfringens* type C, *Cryptosporidium*, rotaviruses; parasites, foot rot/foot scald, etc.) or with the goal of preventing disease challenges.
- All individuals working on, delivering to, servicing, or visiting the sheep operation.

BIOSECURITY PLANNING, MANAGING, AND TRAINING

Biosecurity plans do not have to be complex to work. A plan should address all the ways disease could enter or spread on your operation and describe actions to prevent it. Step 1: Fill out the Movement Risks and Biosecurity document. Step 2: Fill out this checklist. Step 3: Use the biosecurity template to write a biosecurity plan, if that is your goal. Once written, manage biosecurity actions and train others about what is needed. Want to learn more about the topics below? We have a Tip Sheet for each one here: cfsph.iastate.edu/biosecurity.

Look through the questions below. Answer those that apply to your operation and ignore/cross off the others.

TRAINING

Trained personnel know the actions needed to keep animals healthy.

YES	NO	
		Are people entering the operation informed of biosecurity measures?

PROTECTING YOUR FLOCK

Disease can enter from outside sources. Biosecurity actions can protect your animals from disease. Limiting entry to your operation can protect your sheep. Find ways to put up “castle walls” around your livestock. Then protect them by a “moat” or a line of separation (LOS). Entry is only via “drawbridges” or access points, controlled by the people on the operation.

YES	NO	
		Do you have designated entry points to your operation?
		Can you limit entry to your operation?
		Are signs posted at entry points with biosecurity information?
		Do you have a parking area for vehicles that is away from animal areas?
		Do you record movements of animals, vehicles, equipment, people, etc.?
		Are on-farm livestock prevented from nose-to-nose contact with livestock on adjacent premises?



ANIMAL HEALTH AND DISEASE MONITORING

Good husbandry combined with good biosecurity helps animals thrive.

YES	NO	
		Do your animals have access to a clean, dry place to rest?
		Do those working with animals on your operation follow good animal handling practices?
		Do animal caretakers check animals often for signs of disease?
		Do you have a separate area to isolate sick animals?
		Do animal caretakers work with the healthiest and youngest animals first, then older animals, then sick animals last?
		Do you have system for animal caretakers to record health treatments and report animal health issues?
		Do you investigate all animals with unusual signs or those who don't respond to treatment, especially sudden deaths?



VEHICLES AND EQUIPMENT

Animal diseases can be spread by dirty or shared vehicles, machinery, and equipment. Use the Step 1 Movement Risks and Biosecurity document for a list of things that come on or leave: cfsph.iastate.edu/biosecurity.

YES	NO	
		Can you limit entry of shared vehicles, machinery and equipment if they are dirty?
		If equipment is shared with other animal operations, is it cleaned and disinfected before entering your property?
		Can off-farm vehicles and equipment stay outside animal areas?



CLEANING AND DISINFECTION (C&D)

Cleaning and disinfection – also referred to as C&D – is a key part of biosecurity. C&D reduces or kills germs that can spread disease to your animals.

YES	NO	
		Do you thoroughly clean (remove any visible manure, dirt, bedding) and wash all objects before applying a disinfectant?
		Are disinfectants used according to the product label (storing, mixing, concentration, protective gear, rinsing, etc.)?
		Do you always allow a disinfection solution contact time to “sit” and work?
		Are safety measures (e.g., avoiding runoff, wearing safety equipment) taken during C&D?

PERSONNEL (INCLUDING FAMILY MEMBERS, EMPLOYEES, VISITORS)

People who handle animals should be limited to those with clean clothing, clean footwear, and clean hands. This can also protect people from zoonotic diseases that animals can spread to people.

YES	NO	
		Do you limit who has contact with your animals?
		Do you ask all people handling animals to sign in and disclose their last known livestock contact?
		Do you restrict people who have traveled internationally from entering your operation?
		Do you provide/require clean footwear for people entering animal areas?
		Do you provide gloves or a handwashing station with running water, soap, and towels for animal handlers?
		Do you provide/require clean clothing for people entering animal areas?



ANIMAL MOVEMENT

Animals moving on and off your property can introduce and spread disease if biosecurity steps are not taken.

YES	NO	
		Are your livestock individually identified?
		Do you record all animal movement on and off the premises?
		Do you buy animals only from places with similar or stricter biosecurity programs?
		Are new or returning animals separated (quarantined) from all other livestock for 21-30 days before mixing with your home flock?
		Is separate feed and water equipment used for new or returning animals?
		Are sheep from outside sources tested for common diseases before mixing with the home flock?
		Do you have an emergency plan to care for your animals in the event of a natural disaster or other event that could stop animal and supply movement?



ANIMAL PRODUCTS

Animal products (semen, embryos, milk) can also introduce disease if biosecurity steps are not taken.

YES	NO	
		Do you purchase semen/embryos from operations with similar or stricter biosecurity programs?
		Do you record all semen/embryo movement on and off the premises?
		Do you limit purchases of colostrum/milk to pasteurized sources?

CARCASS DISPOSAL

Farms and ranches lose animals due to disease. Dead animals should be disposed of to prevent exposure to live animals. Carcass disposal may include burial, burning, composting, landfill, or rendering. Local and state rules on carcass disposal must be followed.

YES	NO	
		Do you know the approved options to dispose of carcasses in your area?
		Are rendering trucks or other vehicles that haul dead animals to a common disposal site restricted from entering your property?
		Are dead animals disposed of in a way that prevents the attraction of wildlife, rodents, and other scavengers?

MANURE MANAGEMENT

Manure can be good for the soil, but can also contain disease causing germs. Safe handling can help prevent animal and human disease. Local and state rules on manure disposal must be followed.

YES	NO	
		Is animal housing regularly maintained to prevent manure buildup?
		Is manure removed and stored to prevent exposing young animals to disease agents?



RODENT, WILDLIFE, AND OTHER ANIMAL CONTROL

Wildlife, rodents, birds, and other animals like cats and dogs can carry disease on their fur, feet, feathers, or feces. Keeping these animals away from animal areas takes effort.

YES	NO	
		Do you have an on-farm person or professional company place and monitor rodent/pest bait use according to label directions?
		Are steps taken to minimize bird and rodent nesting around your operation?
		Is trash removed often?
		Are roaming dogs and cats prevented from roaming between operations?



FEED AND WATER

Feed and water are essential for animal health. Proper handling is important to prevent contamination.

YES	NO	
		Is fresh, clean water available to all animals throughout the day?
		Are waterers and the areas around them regularly cleaned, and debris removed?
		Do you have a plan to provide water to livestock if it becomes unfit to drink?
		Do you purchase feed only from reputable sources with a quality control program?
		Is grain and feed delivered, stored, mixed, and fed in a manner that minimizes contamination?
		Are feed spills cleaned up immediately?
		If the same equipment is used for feed and manure handling, is it thoroughly cleaned and disinfected before used for feeding?
		Are feeders and the areas around them regularly cleaned, and debris removed?



ACKNOWLEDGMENTS

Development of this material was made possible through a grant 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). Iowa State University is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext.