

Sheep Flocks

A Guide to Biosecurity in Sheep Production

Sheep producers often think biosecurity is something they don't need to worry about, however, veterinarians and health officials routinely see serious disease outbreaks in sheep operations that could have been prevented. A large amount of time, effort, and investment is required in order to earn a significant income from a sheep operation. All too often the risk of introducing new diseases with the addition of animals, feed, and equipment is ignored or not understood. An outbreak of disease new to the flock can have devastating effects, both financially and emotionally.



In order to minimize the risk that disease can inflict on your flock, a practical biosecurity plan needs to be developed and implemented. Practicing biosecurity must become inherent in nature so that acts that violate your biosecurity plan become unthinkable. For example, if you had a footrot free flock, it should be unthinkable to purchase sheep or goats from a source that cannot be verified footrot free.

There are many different goals and many different types of sheep operations so one biosecurity plan will not fit the needs of every sheep operation. Biosecurity plans must be developed to fit individual operations.



Certain practices and/or procedures increase the risk for disease introduction. **The most common way to introduce disease into your sheep flock is through flock additions.** Consequently, knowing the biosecurity practices and disease status of the flock from which you acquire new animals is critical. How well do you know their practices?

Sheep Flock - Risk Factor Questionnaire

Answer these questions about the producers from whom you purchased new animals?

- Are new ewes purchased or introduced into their flock or is their flock closed?
- Do they have ewes on shares or on partnership that mix with other sheep?
- Is there greater than a 2% annual abortion rate?
- Has chlamydial abortions ever been diagnosed in their flock?
- Is there footrot in the flock?
- Has Johne's disease ever been diagnosed in their flock?
- What is the OPP status of their flock?
- Is there a program to prevent the introduction or build up of resistant parasites?
- Do they show sheep? If so, do they isolate sheep after a show?
- Is there club lamb fungus in their flock?
- Are rams traded/shared with other producers?
- Has Caseous Lymphadenitis(CLA) (cheesy gland or abscesses) been diagnosed in their flock? If yes, did they vaccinate?
- Is their flock vaccinated for sore mouth?

Other practices dealing with new additions:

- Are only virgin rams purchased?
- Are new animals isolated before being introduced to your flock?
- Are new additions footbathed prior to arriving on your farm?
- Have new additions been dewormed and treated for external parasites?
- If pregnant ewes are purchased, are they isolated until they have lambed?

Other contacts:

- Are visitors/employees requested to wear clean boots and coveralls?
- Is access to your farm controlled?
- Is shared equipment properly cleaned and disinfected?
- Are shearers provided with plywood or carpet?
- Are shearers scheduled carefully to avoid scheduling one that has sheared elsewhere the same day?
- Are sheep with abscesses sheared last and are the shearers provided with disinfectant if they clip through an abscess?

Feed sources

- Are samples collected of every lot of purchased feed?
- Is there a problem with cats or rodents in your feed storage areas?
- Are ewes fed when they are in drylot in bunks or fence line feeders?
- Are feed and balance rations tested according to sheep requirements?
- Is colostrum used from other flocks or dairies?



Disease monitoring and prevention

- Are animals that die of unknown causes necropsied?
- Do sheep that get thin and "fall out" of your flock actively pursued for a diagnosis?
- Is there a designated area for sick sheep away from your lambing area?
- Are records of sick sheep maintained?

Human Biosecurity Concerns

Sheep can harbor organisms that can cause serious disease in humans. These diseases are called zoonotic diseases and shepherds should avoid practices that increase their risk of acquiring one of these zoonotic diseases.

- Are pregnant women prevented from coming in contact with your sheep at lambing?
- Are OB sleeves used when assisting births?
- Do you handle lambs with soremouth lesions when you have nicks or scrapes on your hands?
- After handling sheep do you wash your hands immediately ?
- Is there a designated area to clean up equipment and mix milk replacer?

Incorporating Biosecurity Into Your Production Management Activities

1. Develop a personal workable plan for your flock

- Determine what will or will not fit the daily routine.
- Implement a few important things first, add more later.

2. Provide family and/or employee training and discussion sessions

- Understanding disease transmission, disinfection, sanitation
- Discuss zoonotic diseases and risks to family members
- Discuss animal isolation, why, how and how long
- Train everyone to detect health problems in livestock (signs, performance, etc.), and explain major disease concerns
- Discuss and evaluate animal movement and contacts within the herd and how contaminated feeds can contribute to disease
- Encourage employee communication of potential problems and provide time for good observation and reporting
- Watch for new disease opportunities and implement barriers to prevent them
- Control visitor activity, outside vehicle traffic, and follow sound rules for your vehicles for transporting animals
- Watch over low control areas (pastures, water, roadside pens, fencelines, etc.)



3. Health surveillance and good flock records

- Keep performance and health data (gain, condition score, carcass data, sickness, deaths)
- Track animal movements (animals, ages, classes, pastures, lots, groups)
- Maintain a visitor log if needed (large operations, seedstock, etc.)

4. Write out a flock immunization schedule

5. Evaluation of plan, document failures, and future planning

- Re-evaluate biosecurity program at least annually, more often if possible
- Discuss problem areas where actions, procedures, or precautions failed
- Review vaccination schedule, disease occurrence and external/internal parasite program
- Current use of products, new products, updated recommendations, new information
- Maintain periodic training and discussion sessions with all employees

Veterinarian: _____

Disease Concerns _____

Risk Factors _____

Management Actions _____

Monitoring Results _____
