



Extension FactSheet

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Biosecurity for Youth Livestock Exhibitors

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What Is Biosecurity and Why Is It Important to Me?

In the context of livestock production, biosecurity refers to those measures taken to keep disease agents out of populations, herds, or groups of animals where they do not already exist. Biosecurity measures can be implemented on a national, state, or herd level. Currently, there is heightened awareness of national biosecurity as the United States attempts to keep foot-and-mouth disease (FMD) out of its animal population.

In addition to national concerns, individual states take measures to prevent the entry/reintroduction of livestock diseases they have been able to prevent/eliminate from their herds by setting requirements for arriving animals. Examples of diseases that are of particular concern to states include brucellosis, tuberculosis, and pseudorabies.

The responsibility for herd-level biosecurity usually rests with the herd owner or management team; they try exclude any disease which is not already present in the herd or limit the spread of disease within the herd. Examples might include *Streptococcus agalactiae* mastitis, bovine virus diarrhea, ovine progressive pneumonia, and swine dysentery. To be successful, biosecurity plans must address how the group of animals will be isolated away from other groups, how traffic (movement of people, animals, and equipment) will be regulated, and how cleaning and disinfection procedures will be used to reduce pathogen levels.

How Do I Determine My Risks?

Reducing the risk of disease in your animals starts with selecting healthy animals for your project. If you are purchasing them, try to purchase from sources that have a well-developed health program in place. Ask questions about the health of the herd. Then work with your veterinarian to design a health program specific to your needs. For many 4-H and FFA members, this will be fairly simple and may only involve some vaccinations, parasite control, and a sound feeding program.

If you plan to exhibit an animal in a terminal show (meaning one in which all the animals are sold for harvest near the end of the fair) and if you do not take that animal to other shows during the summer, the risks of transmitting disease among animals is small and largely limited to your specific farm situation and the animals you have. However, if you plan to exhibit your project animal at one or more shows before the fair, exposure to other animals, equipment used on other animals, or livestock trucks and trailers will increase the risk of your animal contracting and spreading an infection. For example, if someone else hauls your lambs to an exhibition in a trailer that has been contaminated with the germs that cause foot rot in sheep, your lambs could catch that infection. Likewise, if you share grooming equipment with someone at a show, it is possible that the germs that cause “club lamb fungus,” in sheep or “ringworm” in cattle, could be spread to your animal.

If you take your show animals off the farm and expose them to other animals, there is also the possibility that they may bring back new germs that could spread to the other animals, usually of the same species, on your farm. This is most common with the viruses and bacteria that cause respiratory diseases in cattle and sheep, and many herds and flocks have become infected with new diseases in this way. The recent outbreak of foot-and-mouth disease in the United Kingdom has made all of us more aware of how easy it is to spread some infections among our animals.

What Are Some Practical Ways I Can Reduce the Risk of Introducing New Diseases in My Animals?

- Isolate all purchased animals for a minimum of two weeks and, preferably, for 30 days. If they are incubating a disease or if something was present that you weren't aware of, you may detect it before other animals are exposed. Likewise, this gives you some time to do follow-up testing or give booster vaccinations if they are needed.

- When you return from a show or other contact with other animals, isolate your show animals as stated earlier to avoid the possibility of infecting other animals on your farm. Ideally, this would be in a completely separate place to avoid contact or airborne transmission of disease. If this is not possible, it should be a separate pen in a different building or at least a separate corner of the barn. Yes, this is a lot of extra work, but it can be very valuable.
- Contact with other animals, or livestock equipment, can expose your project animals to many types of infectious disease. Fortunately, transmission of disease doesn't occur very often if the contact is brief. However, you should watch your animals closely for at least two weeks after any exposure to observe any signs of developing disease. Most diseases are more easily treated if caught early. Call your veterinarian at the first sign that your animal may be sick.
- If you don't have your own truck or trailer to haul your animals, make sure that the equipment used to haul your animals is clean and recently disinfected. A number of good disinfectants are available for this purpose and include One Stroke Environ^T and Virkon S^T.
- Avoid sharing of grooming equipment and feed and water containers. These items can be a good source of respiratory disease germs and such things as ringworm fungus. Have your own equipment, and if you loan it to someone, clean and disinfect it when it is returned. Allow adequate contact time with the disinfectant, and for some products, you may need to rinse off the disinfectant. Be sure the disinfectant you choose is safe to use on items such as saddles, brushes, combs, and etc. Even if your animal was in a terminal show, most of your equipment will be going home; it should be cleaned and disinfected before it is used again at home.
- Discourage fair visitors from petting or feeding your animals. People going from animal-to-animal can spread disease agents as they go. The recent FMD outbreak in the United Kingdom was blamed on virus-contaminated, smuggled meat products that eventually were fed to pigs. Signs can be posted asking visitors not to touch or feed the animals.
- Practice good personal hygiene. Our animals can be a source of germs that can cause problems in people. Some examples are ringworm, certain *E. coli*, salmonella, cryptosporidia, and some types of staph and strep that can cause skin or wound infections in people. Likewise, we can be a method of transmission of disease between animals. Wash with soap and water after handling your animals and put on clean clothes. Keep your boots and shoes clean and don't carry barn muck into the house.
- Be cautious regarding who has contact with your livestock. Visitors to your farm may pose minimal risk if they don't have close contact with your animals or animal feeds. Be sure they are wearing clean clothes that have not been in contact with other animals. Be sure their boots or shoes are clean and disinfected, or provide them with disposable plastic boots or boots and coveralls you keep for visitor use.
- Once you are at the fair, be sure your animals have access to clean water and feed in containers you provide. Putting Jell-O^R or KOOL-AID^R in your water at home a few days before the fair, and then using it at the fair to mask the taste of different water may encourage your animals to drink normal amounts of water. Minimize nose-to-nose contact with other animals to the extent that it is possible. Keep your animals as comfortable as you can to help reduce stress.

Exhibiting livestock is an enjoyable and educational experience for most people. Following a few simple guidelines to help keep your livestock healthy during the show season can pay big dividends.

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