

HOW DO I KEEP MY ANIMALS SAFE FROM CONTRACTING DISEASE ON THE FARM AND AT EXHIBITIONS?

IT IS CALLED BIOSECURITY!

by Dr. Beth Johnson, Kentucky Department of Agriculture, Field Veterinarian, Office of State Veterinarian

Having healthy flocks/herds is critical to the success of your operation. One of the quickest ways to put the health status of your operation in jeopardy is through contamination occurring at livestock shows, sales, and farms. This article will discuss several methods to prevent bringing diseases home, as well as, how to disinfect areas that are contaminated. The principle behind biosecurity is to perform certain precautionary steps to avoid contaminating you or your animals.

Biosecurity measures on the farm

Clothing: How many times have you gone visiting other farms only to come home and immediately go and check on your animals without changing shoes, clothes or washing your hands? The very first step in biosecurity is to not introduce disease that is present on your clothing, equipment, etc. into your farm or vice-versa disease from your farm to someone else's operation.

- Consider keeping a pair of shoes/boots dedicated to wearing to other farms or production units. Boots/shoes can be easily cleaned and disinfected. If you are unable to do this, then purchase some slip on "plastic booties" that go over your

footwear and can be removed prior to getting back in the car.

- Change your clothes and shoes when you arrive home before heading to the barn. Remember that when you are at another farm, show or livestock market, animals are going to rub up against you or maybe you couldn't resist rubbing on them. Remember that your clothes are fomites for infection. A fomite is an inanimate object or substance that is capable of transmitting infectious organisms from one individual to another.

Disposable Gloves: Disposable gloves are essential to biosecurity! If you have lesions on your animals such as soremouth, please be considerate and provide gloves to anyone handling your animals. As well, throw a couple of pairs into your pockets prior to visiting other farms. You never know when you may need to utilize them and would much rather have a pair to put on rather than be without!

Footbath: Location is the most important key in setting up your footbath. The footbath (Photo 1) should be placed in a strategic location that requires visitors to your farm to step through prior to entering the area where your animals are housed. It may be a good idea to set the footbath up on a solid surface, such as concrete, bricks, or cement blocks to prevent mud around the footbath area. A solid surface can be swept or washed down to eliminate the buildup of dirt that can pollute your footbath. Mud quickly pollutes your footbath, making it useless in providing protection. Footbath solutions should provide adequate disinfection properties yet not stain/bleach clothing. Do not use Clorox.

If a footbath isn't practical, provide slip on plastic booties to visitors. This is for your protection as well as theirs.



Photo 1. Example of a durable footbath mat.

A wooden sign with a rope border. The top part says "PARIS STOCKYARDS" in large, bold letters, flanked by two longhorn silhouettes. Below that, it says "SHEEP & GOAT SALE EVERY FOURTH TUESDAY 3:30pm". Underneath, it lists the address "1120 Millersburg Road, Paris, KY. (859) 987-1977", the hours "Receiving 8am-1pm", and the slogan "Farmers Doing Business with Farmers". At the bottom, it says "Cattle Sales every Thursday 9:15 am" and provides contact information for Craig Taylor and Sara Evans.

PARIS STOCKYARDS

SHEEP & GOAT SALE EVERY FOURTH TUESDAY 3:30pm

1120 Millersburg Road, Paris, KY. (859) 987-1977
Receiving 8am-1pm
"Farmers Doing Business with Farmers"

For More Information Contact:
Kathy Meyer 859-749-7594

Cattle Sales every Thursday 9:15 am

For More Information Contact:
Craig Taylor, (859) 771-0146 or Sara Evans, (859) 987-9945



Photo 2. Sample biosecurity sign

Biosecurity Signs: In today's society, it is recommended that you post signs at the entrance to your farm stating that you take pride in biosecurity, i.e. photo 2 shown above.

Quarantine: Another measure of biosecurity is to quarantine all new additions to your herd/flock. Animals should be confined to an area that does not allow commingling with other animals on the farm for a minimum of 10 days. During this time, parasite treatment and fecal examinations should be performed prior to placing them in with the resident herd/flock.

Biosecurity measures at show

Disinfect Show Pens: If at all possible, try to show your animals off of your trailer. This means that you do not take them off your trailer except to prepare them for the show and they are placed back into the trailer immediately after showing. If you are required by show management to place your animals into pens provided by the them, it is important to remember that these pens have been used by other producers and their animals. Very rarely are pens sanitized between use and can easily be a source for certain diseases such as ringworm and soremouth. Other animals have rubbed up against the pen and contaminated the pens. If you have to place your animals in these pens for various reasons, then disinfect the pens with a spray and wipe down as much of the hard surfaces you can with a quality disinfectant that is viracidal as well as fungicidal. Use of a pump sprayer makes this job fairly easy to perform.

Use Disinfectant Wipes: While being shown, judges usually feel the sheep

DISINFECTANTS:

Phenols (Lysol, Tek-trol, Environ)	Effective against fungi & many bacteria Retain efficacy in presence of organic material	Pine-tar odor Turn "milky" in water
Iodophors (Betadine, Isodyne, Eladol)	Effective against bacteria & many viruses	Can stain clothing & surfaces Does not work well in presence of organic material
Hypochlorites (Bleach, Halazone)	Relatively inexpensive Effective against bacteria & many viruses	More active in warm water Irritating to skin Corrosive to metal
Quaternary Ammonium (Germex, Virex, Vindicator)	Odorless, non-irritating, deodorizing, colorless Have detergent action	Inactivated in the presence of some soaps or soap residues

and goats for muscling, fat cover, udder attachment, teat structure, etc. With Boer goats, each animal's mouth is examined to make sure the front teeth are aligned up properly with the upper pad. Most judges do not clean their hands between each animal; therefore, the risk of transferring skin diseases such as ringworm or soremouth is a possibility. Conscientious judges usually will request hand disinfectant wipes to use in case they encounter a suspicious skin lesion or other contagious pathogen while examining the animals. If you are a show superintendent, it is your responsibility to provide this if needed.

Disinfect Animals After the Show: What should you do to protect your animal after they leave the show ring? Many producers will bathe their animals immediately after the show with an iodine based shampoo. This is a wonderful way to disinfect your animal, but at many shows all you want to do is load up and head home after an exhausting day of fitting and showing your animals. I have recommended a product for several years called Trifectant that can be mixed in water and sprayed on the animals as a leave on spray. This seems to help tremendously with control and prevention. Consult with your veterinarian and see if there is a product they would recommend.

Disinfect Equipment: Remember that shared equipment (shears, hoof trimmers, drench syringes, trailers and other small ruminant transport means) may transfer disease as well. Be sure that all equipment is disinfected prior to using.

Biosecurity Resources

Whether producing milk, meat or fiber, an excellent resource manual for biosecurity is the **National Biosecurity Reference Manual: Grazing Livestock Production**. The manual provides a set of voluntary, cost-effective guidelines to help reduce the risk of disease entering a property, spreading through the livestock population, and/or being passed to surrounding livestock operations. It outlines recommended measures under five management areas: Livestock; People, Equipment and Vehicles; Feed and Water; Pests and Weeds; Management.

The link for this manual is shown below:
<http://www.farmbiosecurity.com.au/toolkit/plans-manuals/national-farm-biosecurity-reference-manual-grazing-livestock-production/>

<http://www.farmbiosecurity.com.au/wp-content/uploads/2013/06/Farm-Biosecurity-for-Livestock-Producers.pdf>

Footbath information:
<https://extension.umd.edu/poultry/small-flock-production/footbaths>

"Excellence in Exhibition – Preventing Disease in Animals and People" – Online Course:
<http://www.cfsph.iastate.edu/YouthInAg/>

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