

Biosecurity – PPT Script

Community

1. Biosecurity Quote

From a small backyard youth animal project to a large commercial facility, biosecurity is KEY in any animal operation. Practicing basic biosecurity can reduce the spread of and even prevent diseases to humans and animals.

So what is biosecurity? Biosecurity is defined as "procedures intended to protect humans or animals against disease or harmful biological agents." Youth practice biosecurity every day, through basics such as hand washing, and may not even realize it. As a livestock exhibitor, it is important to not only do these basic biosecurity practices but also recognize why they are important and continuously evaluate their own facilities to ensure both animal and personal health.

When you hear biosecurity, what does that mean to you as a livestock exhibitor? (Ask for audience examples).

2. Know the Difference

Knowing the different approaches to biosecurity can help you prevent transmission and keep your animals safe.

External Biosecurity means to keep the diseases out of the herd or flock. This is the prevention piece - stopping the disease from having the opportunity to affect your animals. What are some ways that we can prevent or minimize the diseases from entering your flock or herd?

Internal biosecurity means to keep the diseases that are already in one or more sections of the herd or flock from spreading to other sections. This is keeping your animals safe once the "threat" is there. What are some ways you can stop the spread and keep the healthy animals unaffected?

3. Diseases

Disease pathogens can move from one farm to another. We as producers need to be aware of how diseases spread so we can help in the prevention of spread.

Diseases are commonly spread through multiple ways.

Non-farm animals such as *Rodents, wildlife and birds* can transmit disease or disease agents. Depending on the disease agent, these diseases can affect animals of the same species or spread through various species or even to humans. *Pets* such as your cats and dogs should be kept out of the barn, as they can bring in disease if allowed to wander to neighboring farms where there could be sick animals.

Disease pathogens may be present on *vehicles and trailers* (including tires) or *equipment* (i. e. sharing show equipment or borrowing scales).

Humans can transmit diseases by not washing hands, changing clothes, or footwear when going in and out of facilities. (i. e. visiting multiple farms in one day when looking at pigs). Introducing *new animals* or animals that have been off-site can introduce new pathogens (i. e. taking goats to weigh-ins and bringing them back to your goat herd). You want to quarantine these animals a minimum of 10 days when you bring them home to be sure that they are not introducing a disease.

Clothing and shoes can be sources of disease agents (i. e. wearing the same boots from one farm to the next without cleaning and disinfecting them between visits). Consider having footwear that is only for your facility. Footwear that is worn in barns and then your vehicles, stores, etc. can and do cause a biosecurity hazard.

Shared Equipment that is shared between your animals or loaned to others can be a transmitter of disease. Disease agents can linger on surfaces, and it is important to clean daily or upon return of the equipment.

Wind and air movement may transmit some pathogens. One example is PRRS (Porcine Reproductive and Respiratory Syndrome) in pigs which can be airborne for up to two miles.

4. Knowledge Check

True or False?

Changing your shoes/ boots prior to entering an animal facility is a good biosecurity practice to follow?

Answer: TRUE!! Having specific clothing for animal facilities is a great example of an external biosecurity practice

External biosecurity is aimed at keeping diseases out of the herd/flock. Changing shoes/boots prior to entering an animal facility is a good external biosecurity practice to prevent diseases.

5. Create a Biosecurity Plan

A biosecurity plan should be in place regardless of the number of animals you have. You first want to *evaluate the risks to your animals*. Think back to those external factors- you can't prevent the spread of diseases if you don't know where those disease agents are coming from. Make a list of risks you can think of. Once you have done this, you are ready to *Create a plan*. This will be a unique plan for you! A biosecurity plan should be achievable based on your facility, resources, and other restricting factors. Focus on the prevention of disease; if you can prevent the disease then you won't have to treat it. This will be updated and adjusted as you move forward and your needs or facility changes.

6. Biosecurity Plan That Can Work

Remember planning is a process. Start where you are now and know what limitations you may have as a youth producer. You want to:

- Seek help from parents, older members, local producers, and veterinarians to make a plan that is going to work for you.
- Start Small with implementing a few important things first and then adding more later.
- Be realistic when determining what will or will not fit the daily routine and know what would be too much for you.
- Daily Observation include a process for observing and monitoring herd health, and what to do if you find unusual or suspicious signs.
- Visitors need to be limited. Be sure to communicate to visitors (employees if applicable) about your biosecurity protocols, and how they can help you keep your animals safe.

<https://www.healthyagriculture.org/prevent/biosecurity-plan/>

7. Cover the Basics

As youth livestock producers, your biosecurity plan should focus on the 3 MAIN TYPES of biosecurity: Physical, Personnel, Informational (phe.gov)

1. Physical Biosecurity is identifying Internal & external factors and using physical means to keep those hazards out of your facility.
2. Personnel Biosecurity is ensuring all persons in contact with your herd or flock follow basic biosecurity practices; such as wearing designated barn clothes/shoes, hand washing, not eating during or after animal care without washing.
3. Informational Biosecurity is a way of notifying ANYONE who would come in contact with your animal(s), what they should or shouldn't do.

8. Physical Biosecurity

Physical Biosecurity measures is the act of putting up physical barriers to keep diseases out of the herd/ flock.

We want to be sure that we *Control wildlife and pests*. You can prevent contact with your animals with use of perimeter fencing and bird screening. Dogs and cats are unacceptable ways of controlling rodents in and around livestock buildings.

New or sick animals should be *quarantined*. When possible, establish an isolation facility or area for quarantining new animals or sick animals at your farm that is remote and/or isolated from the existing animals. New animals should be quarantined for at least 10 days before integrating them into the herd or flock. Work with your veterinarian on an appropriate quarantine time for sick animals.

Limiting the number of day-to-day visitors to your facility and minimizing their contact with your animals helps in preventing an introduction of new disease pathogens. Don't be afraid to question them about recent contact with other animals and if they have been sick. Visitors should be away from the same species of livestock at least 24 hours. Consider supplying disposable plastic boots to all visitors.

Work with your veterinarian to periodically survey your herd or flock for different disease challenges. They have seen MANY things and can provide guidance on ways to improve.

Be sure to follow a sanitization protocol your Facility. An effective biosecurity plan includes a complete cleaning and disinfecting of each pen, coop, or building between groups of animals. Completely remove all organic materials and use compatible soaps and disinfectants to effectively kill harmful organisms. Allow the pen, coop, and building to dry completely before putting a different or new animal or the next group of animals in it. Complete drying further reduces the chance that disease-causing agents will survive until the next animal(s) arrive.

9. Personnel Biosecurity

Personnel Biosecurity ensures that all persons are responsible for adhering to security and safety regulations in a biosecurity plan.

Practicing good *Hygiene* is important. Encourage washing hands and arms frequently with soap and water, including before and after handling their animals, before eating or before touching faces, mouths, eyes or noses. Have a place available for everyone to be able to wash. Keeping food and drink out of animal areas discourages animals from sharing your food or drink, but also helps to eliminate chances of foodborne illnesses. Wearing shoes that only go into the barn and not worn anywhere else. Wearing shoes into the barn and then into another barn or around other animals can transmit diseases. Part of internal biosecurity. Wearing disposable coveralls or wearing coveralls that are specifically dedicated to your barn help to prevent spread. Before or after going to the barn change your clothes. Make sure these go straight into the washer and are not worn around other animals.

Daily Observation should be done. Youth should perform daily observations of all animals to assess the health of the animals both on the farm, and those transported to other sites or to the market. Daily observation helps in identifying when you may have an issue starting.

Wearing the correct *Personal Protective Equipment (PPE)* can protect you and your livestock and stop the spread of disease. Before handling livestock, you should be wearing the correct shoes (boots), long pants, long sleeve shirt (if appropriate), and gloves (if appropriate).

Sanitation of equipment after use. This prevents the spread of diseases between animals. This could also be equipment that the caregiver uses and can prevent spread of disease to human.

10. Information Biosecurity

Information Biosecurity is used to notify all persons of expectations that you have at your operation. Each person can have different rules at their facility so it's better to be upfront about what your expectations are so that you can prevent mishaps.

Having *signage* will allow visitors to know where they are allowed to go and where they are not allowed to go on your farm or in your barn. This can help prevent accidents, protect animals, human health, and visitors, and stop the spread of diseases. (ie. Caution, this goat bites, do not touch)

Provide your *visitors* with your *expectations*. Let them know that they need to wear boots that will be cleaned before and after entering the barn. They need to be washing hands before and after touching livestock or equipment and let them know where they can wash. Remind them to be paying attention and adhering to posted signage.

11. Knowledge Check

When should you start a biosecurity plan?

- A. When you purchase an animal
- B. Once an animal gets sick
- C. Before you purchase any animals
- D. When you take the animal to fair

Answer: C. Before you purchase any animals

Biosecurity is a measure that focuses on the prevention of the entry of unwanted diseases, meaning that a herd/flock biosecurity plan should be made before you purchase any animals.

12. Everyone is responsible for Biosecurity!

As you have seen, everyone is responsible for Biosecurity. When we, the youth animal producer, our families along with any employees that your farm may have follow the biosecurity practices we can raise healthier animals. We need to remember that visitors can cause a biosecurity breach and let them know what our practices and expectations are when they visit. When biosecurity is not followed and there is a breach animals can become sick and/or diseases can be spread. Current diseases that spread rapidly and have harsh