

**OUTREACH
BRIEF**

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BIOSECURITY BEST MANAGEMENT PRACTICES

Biosecurity can best be defined as management practices that prevent the introduction of infectious diseases into a herd or flock. Everyone who is involved in the animal production circle needs to be aware of biosecurity. This includes event planners, producers, industry workers, food processors, and the foreign traveler or the local host of a foreign traveler. Biosecurity should be of utmost importance in any animal operation, large or small.

The key concepts in biosecurity are mitigation, preparedness, response and recovery.

Mitigation

Mitigation can be defined as determining ways to make something less harsh or harmful. One can think of mitigation as a type of prevention. Some best management practices include:

- Everyone who enters the facility should disinfect hands and feet. Keep a small tub containing a disinfectant (such as bleach) and a brush outside the entrance to the facility. Make sure the disinfectant is fresh each day.
- Spray all vehicles driven onto the premises with a disinfectant. Make sure to disinfect the tires of the vehicle, since they were in contact with the ground at other locations.
- When bringing trailers into a facility, spray the tires with a disinfectant to ensure that no germs are on the tires. If the trailer is dirty (manure), wash it out at a car wash before driving it into the facility. Harmful germs can be picked up just about anywhere—on roads, in parking lots, or in other people's pastures.
- All workers should have shoes designated specifically for your facility. Put them on when you get there, and take them off when you leave.

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- When lending or borrowing tools or equipment, wash and disinfect them as they enter and exit the premises.
- Do not haul unbagged trash or garbage from one site to another. Seal it in a plastic bag.
- Follow regulated feed guidelines. It is dangerous and illegal to feed meat scraps to livestock, as these products can carry diseases such as foot and mouth disease and BSE.
- Know about the people who come on your property. Who are they? Where have they been? Why are they there? Beware of individuals who are lingering near fences, barns, water sources or anywhere else. If an individual seems suspicious, call your local law enforcement agency.
- Lock gates when entering and leaving your facility.
- Keep livestock feed and veterinary supplies in a secure location even at home.
- When at a show, do not leave your feed sitting in the barn. Lock any excess feed or equipment in the trailer or truck. Do not leave water buckets unattended. Fill up your buckets every time you water your animals. To prevent the spread of disease, do not share feed or water buckets with other exhibitors.
- Before buying animals, request information regarding the disease and vaccination status of the herd of origin. Test animals for disease before shipment.
- Isolate/quarantine all new animals for a minimum of 2 weeks. Animals that have been at a show or fair should also be isolated for 2 weeks. Isolation helps prevent animals that have a disease from spreading it to your herd.
- Animals brought in from out of state must be inspected by a veterinarian; you can use this same practice with animals that are bought within the state to ensure that they are healthy.
- Develop a list of standard tests for all incoming animals. Complete the testing of all animals while they are in isolation/quarantine for 2 weeks.
- Create a vaccination plan. Vaccination is the basic step in prevention. Vaccinate all your animals appropriately and follow up as directed with yearly boosters.
- Prevent animals' bodily fluids from contaminating feed, equipment and other animals.
- Look for disease signs in animals. These might include unexplained death; a high percentage of animals sick with the same symptoms; blisters around the animals' mouths, noses, teats or hooves; and central nervous system problems such as staggering or falling. In poultry, signs could be lack of energy or appetite; watery, green diarrhea; decreased egg production; swelling around the eyes, neck and head; sneezing, gasping or coughing; discoloration of wattles, combs and legs; and tremors, circling or other nervous system problems.

These best management practices are just as important for those who have backyard poultry flocks or who raise a small number of live-stock as they are for large, commercial operations.

Preparedness

Preparedness is the planning, training and exercising of the mitigation practices to ensure their usefulness. It is easy to think of different ways to protect a premises, but the ideas may not all be useful or cost effective. One important part of preparedness is knowing which diseases could potentially affect your animals and being familiar with symptoms of those diseases, so that if problems occur you are able to respond quickly. For this purpose, producers should practice the plan and analyze the weaknesses and strengths of the facilities to determine what should be done to protect it.

Response

The response phase is the actual reacting to and handling of an event in the most efficient and effective manner possible. The first 24 hours of a disease outbreak are crucial. Producers should report any abnormal health issues to a veterinarian or to state/federal animal health regulatory officials immediately. Do not

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Implement the “Shoot, Shovel and Shut Up” method since this would just delay the response and potentially cause more damage. The more rapidly a diagnosis is made the quarantine zones established, the more likely officials will be able to control the spread of the disease to other cattle and premises.

Report anything that is suspicious to your veterinarian or the Texas Animal Health Commission (1-800-550-8242) and U.S. Department of Agriculture (Austin location, 512-916-5565). These agencies do not charge you or your local veterinarian to investigate possible disease outbreaks. When these state and federal agencies respond, the individuals involved will be responsible for determining quarantine areas, collecting and submitting appropriate samples, and deciding what to do with diseased animals.

Recovery

Once a disease outbreak has either been eradicated or brought under control, it is time to start the recovery phase of the process. During this phase activities are conducted that will help restore the premises to an acceptable and operational level. Some practices might include covering pits, sampling ground water and disinfecting. Authorities can help determine what needs to be done before animals are restocked to ensure the disease does not recur.

These practices all rely on one another, and after the recovery phase, it cycles back to the mitigation phase to improve on areas that might need some attention. This continuous cycle will help to ensure that infectious diseases are prevented, controlled, or eradicated.

Additional Resources

TAHC

<http://www.tahc.state.tx.us/news/brochures/biosecurity.pdf> http://www.tahc.state.tx.us/news/brochures/TERT_Brochure.pdf

Biosecurity in Practice Series. Institute of Agriculture and Natural Resources. Great Plains Veterinary Educational Center. University of Nebraska—Lincoln.

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From “Train-the-Trainers Curriculum for Foreign and Emerging Animal Diseases”,

Floron C. Faries, Jr. and Angela I. Dement. FAZD Center. 2008