SSERT-201 03-11



The Species Specific Educational Resource Team (SSERT)

A Series for Small-Scale Producers and Hobby Owners

Farm Level Biosecurity Practices for Small Beef Cattle Producers



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Keywords: Biosecurity, Foreign Animal Diseases, Beef Cattle

What is Biosecurity?

iosecurity refers to farm management practices that are put in place to prevent the introduction of disease-causing organisms onto a farm. Zoonotic diseases are diseases that are transmitted from animals to humans. Foreign animal diseases are those that are not currently in the U.S. This brochure provides useful information and easyto-follow guidelines for preventing the introduction of foreign animal diseases and zoonotic diseases of beef cattle. The same guidelines should be used to prevent more commonly known diseases of beef cattle. The financial benefits of using good biosecurity practices far outweigh the costs of treating or managing these diseases once they occur. Biosecurity practices suitable for small beef cattle producers include:

1. Restrict visitors, outside traffic and equipment

- Restrict visitor access on your farm.
- Require visitors to wear disposable boots when vis-

iting animal areas on your farm.

- Restrict access of outside vehicles (feed trucks, stock trailers, etc.) to designated areas of your farm.
- Avoid equipment sharing or thoroughly clean equipment shared between farms.

2. On-farm hygiene

- Use and leave work clothes on your farm (animal premises).
- Change into work clothes/boots when tending to cattle on your farm.
- Use footbaths at entrances to animal handling facilities and change chemical solution periodically to ensure effectiveness.
- Thoroughly clean equipment (water troughs, feeders, tag applicator, etc.) before and after use on your farm.
- Provide adequate space per animal and proper housing (ventilation, light, shelter, drainage, etc.) for confined animals.

3. Disposal of dead animals

• Bury dead animals deep (minimum of 3 feet) paying close attention to local and state rules,

laws, and regulations regarding disposal of dead animals.

- Dispose of dead animals away from streams (natural and seasonal) and other bodies of water such as lakes, ponds, and aquifers.
- Bury in compost if the compost pile is functional (internal temperature is more than 130° F).
- Burn dead animals paying attention to local and state laws regulating this method of animal disposal.
- Use rendering companies (if disease is diagnosed as non-contagious) if they will accept the species of animal.
- DO NOT discard dead animals in nearby bushes or woodlands.

4. Quarantine

• Isolate all new animals for at least 30 days, keeping them more than 300 yards from existing animals.

- Use different feeding, watering and cleaning equipment for new animals.
- Isolate and treat sick animals.
- Establish a buffer zone to separate sick animals from healthy animals.
- Construct good fences and avoid fence line contact between your animals and animals on neighboring farms.

5. Vaccinations

- Follow routine schedule as recommended by the local veterinarian.
- Adhere to vaccination guidelines in case of a new disease outbreak.
- Use recommended vaccine dose, method of administration and site of injection.
- Store vaccines as recommended, order quantities to be used in a single vaccination session, and administer using sterile techniques.



Photograph complements of Kenneth Andries, PhD, Kentucky State University



Figure 1. Give shots or injections in the neck and not the hip Illustration complements of Renita Marshall, DVM, Southern University Cooperative Extension Program

Disease Management

If a disease outbreak occurs on your farm, the following measures should be taken to prevent further spread of that disease:

1. Report disease occurrence

- Call the local veterinarian in the event of a disease occurrence.
- Follow recommendations of the local veterinarian on effective ways to manage the disease.
- Alert neighboring farms to prevent exposure between herds through fence-line contact or vehicle traffic.

2. Management of sick animals

- Isolate sick from healthy looking animals.
- Provide adequate care of sick animals.
- Treat sick animals as recommended by the local veterinarian.
- Collect feed, plant or soil samples for analysis at state investigation laboratories if recommended.

3. Disposal of dead animals

- Consult your local veterinarian to ensure that the necessary samples are recovered before the animal is buried.
- Bury, burn or dispose of dead animals as advised by the local veterinarian or state animal health agency paying close attention to state or local laws.

4. Quarantine

- If your animal(s) become sick or die due to a foreign animal disease or zoonotic disease, expect your farm to be placed under quarantine.
- Follow all the steps recommended by authorities to avoid the spread of disease.
- Do not allow visitors on your farm and do not visit other farms.
- Re-evaluation of your beef herd will be necessary before a quarantine order is lifted.

Disease Prevention

Disease prevention is the most effective method of animal health management.

- Follow a vaccination schedule recommended by the local veterinarian.
- Adopt effective biosecurity practices on your farm.
- Monitor cattle for the presence of any disease that may not normally be observed.
- Routinely test for the presence/absence of disease causing germs in your herd.
- Visitors should be restricted in animal areas and general hygiene practices should be observed on your farm.
- Visiting farms while on vacations abroad should be discouraged.
- All animals originating from abroad (including

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pets such as alpaca) should be screened for the presence of disease and quarantined following state and federal guidelines.

- Animals participating at local, state or national shows should be quarantined upon return to the farm.
- All animals introduced to your farm (new purchases and leased/borrowed animals such as breeding bulls) should be evaluated or tested for diseases on the recommendation of your local veterinarian, then quarantined for at least 30 days before entering your herd.
- All people working with animals should use protective clothing and disposable gloves when physically handling animals on your farm.
- Provide adequate and good quality feed and do not use ruminant animal products such as meat

and bone meal, blood meal and brain tissue in your feed mixtures.

- Provide adequate and clean drinking water at all times.
- Provide good housing and equipment, ensuring adequate space and ventilation requirements.

References:

Committee on Foreign and Emerging Diseases, Foreign Animal Diseases, United States Animal Health Association

Davis Veterinary Medical Teaching and Research Center, University of California, Tulare, CA

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