

## Chapter 8

# Biosecurity

Biosecurity is a system of management procedures designed to prevent or greatly reduce the risk for introduction of new diseases to a cattle operation. Implementing a biosecurity program is like purchasing an insurance policy for the health and productivity of the herd. Producers should work with their veterinarians to develop a plan. Biosecurity affects beef quality directly in the case of diseases that pose a risk to public health and indirectly by reducing the potential of the meat quality being impacted by the disease or its treatment.

An effective biosecurity plan will involve your employees, veterinarian, and other specialists. It will provide reasonable protocols, which are more likely to be followed, to minimize introduction of new diseases. The plan will require education of farm visitors and may include physical barriers. The biosecurity plan and the actual adherence to the plan must be periodically reviewed and adjustments made as needed.



## Sources of New Disease

New diseases can be introduced to your cattle operation in a number of ways, including:

- Cattle, including replacements from other herds, bulls, fence-line contact with neighboring herds, shows and fairs, and strays
- Manure on footwear and clothing, tractor and equipment tires, trailer, and equipment (foot trimming, etc.)
- Water, including ponds and pools of standing water, which animals may have access to
- Humans moving between herds or farms
- Non livestock, including pets, birds, deer, coyotes, rodents, ticks, and other insects
- Feed; especially feed which could be contaminated with feces, urine, molds, or ruminant by-products

## Animals New to Your Herd

- Know the herd health status of herds supplying replacements or bulls.
- Obtain the health/vaccination history of new animals.
- Isolate new animals in a location away from your cattle for a period of time (2 to 4 weeks) before introducing them into your herd. This practice includes not sharing feed or water and no nose-to-nose contact.
- Observe the health status of new animals daily before introducing them into your herd.
- Have your veterinarian speak with their veterinarian regarding the health at the farm of origin.

The goal is to prevent disease from ever entering the operation and to minimize the risk of infection if it does occur.

## Animals in Your Herd

- Be a diligent observer of your cattle for signs of disease.
- Know the signs of important foreign animal diseases, which include:
- Blisters around animals' mouths, noses, teats, or hooves (FMD)
- Central nervous system disorders, such as staggering and falling (BSE)
- Abortions or abnormal discharges
- Report any sudden, unexplained death loss to your veterinarian.
- Have your veterinarian necropsy every dead animal, unless you are certain of the cause of death.
- Report to your veterinarian any severe illness affecting a high percentage of animals.
- Insist that outside individuals coming onto your farm adhere to clean, sanitary practices, such as clean clothing and footwear, clean equipment, and clean trucks.
- Maintain fences to prevent mixing your cattle and your neighbor's cattle.
- Dispose of dead animals properly:
- If hauled off the farm, animals should be placed on the outer perimeter of the farm and away from the public view.
- If composting is utilized, a site should be selected to protect runoff from contaminating water sources and located away from cattle.
- Minimize nonlivestock traffic, including pets, wildlife, rodents, birds, and insects.
- Keep feed storage areas free of all animals.



## Animals Returning from Shows or Fairs

- Do not share equipment with other exhibitors.
- Change or wash clothing and shoes worn at the fair before working with animals at home.
- Isolate from other animals for a minimum of 14 days.

## Visitors

- Minimize the number of access routes to your operation. Consider locking or obstructing alternative entry sites.
- Require visitors to use plastic boots or disinfectant footbaths.
- Minimize unnecessary direct contact with cattle.
- Place signs describing visiting policies in clear view.
- Keep a record of visitors, including dates.
- Determine if visitors have been on other farms/ranches prior to visiting you. Special care is needed if visitors have recently been in another country.
- Observe for suspicious individuals or abnormal activities.

## Vehicles and Equipment

- Designate parking places for visitors. Minimize their crossing tracks with feed suppliers/deliveries.
- Minimize all vehicle traffic in livestock and feed areas.
- Do not contaminate feed with manure.
- Have separate equipment for feed and for manure handling.
- Clean and disinfect equipment used for handling manure and dead animals before handling feed.

You cannot exclude all wildlife and may not wish to exclude visitors, but you can take steps to greatly reduce the risk of them introducing a new disease.