Biosecurity

4 Components: Quarantining, testing, vaccination, sanitation

Quarantining incoming cattle is one management practice that may decrease the likelihood of certain diseases being introduced to the herd. Quarantining means keeping incoming cattle separate from the established herd for a period of time. The quarantine area should be set up so new arrivals will not share the same air space, food or water as the established herd.

Testing of imported cattle can be useful in decreasing the risk of introducing disease into a herd. Tests should be evaluated to ensure they will achieve the desired goal of decreasing the risk of disease entry into your herd. We need to remember that disease testing is not 100 percent effective, and the sensitivity of the test should be considered when testing potential animals for addition to your herd.

Vaccination of the resident herd and imported animals is another way to manage the risk of mixing cattle of different disease statuses. Vaccination is the most common way veterinarians and producers have attempted to solve biosecurity risks. However, the effectiveness of vaccines is limited, and vaccination should not be considered the only or even the primary means of decreasing disease risk. Even under optimal conditions, not all cattle will respond to vaccination, nor will all that respond to vaccination be protected from infection.

Sanitation involves protecting herds from exposure to infectious agents. Sanitation practices may involve requiring all visitors, including veterinarians, milk inspectors, artificial insemination techs and other service personnel, to wear clean boots and coveralls. A footbath and brush should be provided for visitors to disinfect their boots.

Consider Biosecurity Measures Carefully

You need to consider the cost effectiveness of the biosecurity measures you institute carefully and discuss them with your veterinarian. The risk of introducing disease, the cost of the disease once it is introduced into a herd, the cost of the biosecurity measures and the amount of risk producers are willing to live with will determine the biosecurity measures that livestock producer set for their operation. As time goes on, biosecurity likely will become more important as food safety and quality, international trade concerns and efficient production pressures increase.

One last word of advice: The highest biosecurity risk to a herd is the young sale barn calf brought in to replace calves that died. Just say "no" to those sale barn calves.

Turnout Checklist

Health Management

Body condition score (BCS) on a scale of 1 to 9:
- Bulls should have a BCS from 5.5 to 6.5 prior to breeding.
  - Score 5 - moderate
  - Score 6 - high moderate

Examine bull prior to turn out for:
- Soundness - check feet and legs
- Reproductive soundness - get a breeding soundness exam:
  - Semen testing
  - Scrotal circumference
  - Visual exam of reproductive anatomy

Disease Management

- Deworming for internal and external parasites
- Vaccinations to protect against preventable disease
  * Consult your veterinarian for recommended vaccinations in your area.

Records

Keep up-to-date records on all your bulls so that if a problem occurs, you can narrow it down more quickly.

Records to obtain for purchased bulls:
- Health
- Pedigree
- Expected progeny differences
- DNA (if available)
Bulls should have a body condition score (BCS) of 5.5 to 6.5 prior to breeding, based on the BCS system for beef cattle from 1 (emaciated) to 9 (excessively fat).

**Score 5 - Moderate**

The 12th and 13th ribs are not visible to the eye unless the animal has been shrunk. The transverse spinous processes can be felt only with firm pressure, and they should feel rounded but not be noticeable to the eye. Spaces between the processes are not visible and are distinguishable only with firm pressure. Areas on each side of the tailhead are starting to fill.

**Score 6 - High Moderate**

Ribs are fully covered and are not noticeable to the eye. Hindquarters are plump and full. Springiness is noticeable over the foreribs and on each side of the tailhead. Firm pressure is required to feel the transverse processes. The brisket has some fat.

Yearling bulls should be gaining 1.5 to 2 pounds per day prior to breeding.

Know the feeding program that your bull has been on and design a similar ration with gradual changes to adapt the animal to the new diet.

If you don’t know the previous ration, start with:

- Good-quality hay (not alfalfa)
- 4 pounds of concentrate
- Grain (corn, oats) or silage
- A vitamin/mineral program

Test your feed to know what you have and make changes or add a concentrate if needed.

A good bull ration should contain approximately:

- 62 to 65 percent TDN (total digestible nutrients)
- 11 to 12 percent CP (crude protein)

Consult a nutritionist or your local Extension agent for help in developing a ration.