

# Stand Guard

Every cattle producer's biosecurity plan matters.

by *Deana Hardee, DVM*

**M**any animal diseases threaten U.S. livestock sectors. Currently, U.S. poultry producers are battling Avian Influenza while U.S. pork producers are guarding against the international spread of African Swine Fever. For cattle producers, state and federal programs have so far prevented the introduction or re-introduction of highly contagious diseases like Foot and Mouth Disease. However, protecting the national herd is every producer's responsibility. This begins with assessing your own biosecurity plan.

Biosecurity is managing the risk of pests and diseases entering, emerging, establishing or spreading and causing harm to animals, plants, human health, the economy, the environment or the community.<sup>1</sup> It is a broad concept, which applies to any disease or pathogen in the herd. To simplify the idea, we can ask ourselves what role we play in preventing and containing disease spread.

## Key biosecurity components

There are three main areas an operation needs to evaluate — incoming cattle procedures, current animal health status and potential disease spread and containment.<sup>2</sup>

### Incoming cattle procedures —

The first step in a biosecurity plan is understanding the herd's risk to outside disease from new additions. In many operations, bulls and replacement heifers enter the herd on

an annual basis. Buying cattle from a reputable breeder with an effective herd health plan can prevent disease from entering your operation.

Regardless of the animal type or production phase, visually inspect all incoming cattle. Keep in mind that animals in a pre-patent period (just before disease) may not show any outward signs of illness. Quarantine new additions to the herd for at least 21-30 days.<sup>3</sup> Work with a veterinarian to understand which vaccinations may be needed or if any testing may be necessary before introducing new additions.

### Current herd health status —

The herd's overall health status is a foundational part of biosecurity. A comprehensive herd health program with routine and appropriate vaccination, combined with a solid plane of nutrition, can prevent disease from entering. In some cases, a disease or pathogen may be endemic (widespread or regularly found in the area). Cattle moving to a new region could be particularly susceptible if naïve to the disease. Unfortunately, some diseases can cause production losses although the disease may not be clinically apparent.

### Disease spread and containment —

Sanitation practices are critical when it comes to preventing disease introduction and controlling spread within the herd. This includes many touchpoints in the operation. Prevent inanimate

objects (fomites) from spreading disease. These include things like visitors' clothes and boots, vehicles, equipment, etc. Cattle delivery trucks should be washed and disinfected both inside and out prior to cattle delivery. When processing cattle, properly clean tools and instruments to prevent disease spread within a herd.

Vectors such as wildlife, rodents and insects can spread diseases such as Leptospirosis, Anaplasmosis or Blue Tongue — just to name a few. Routinely cleaning feeding and water areas can help control these populations.

## Plan to prevent

Biosecurity requires a multifaceted approach with a basic knowledge of how the risk of introduction can be minimized, the current health and disease status of the herd and the potential for disease spread. A bit of science combined with common sense can go a long way in sound biosecurity practices. Developing a herd biosecurity plan can be as simple as outlining the practices you may already have in place. Further evaluating these and addressing any holes in the plan will prepare you in case of an outbreak. Work with your veterinarian to think through a solid biosecurity plan. Prevention and planning are the keys. **HW**

**Editor's note:** Deana Hardee is a technical services veterinarian at Merck Animal Health. US-NON-221000014  
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<sup>1</sup>Robertson ID. Disease control, prevention and on-farm biosecurity: The Role of Veterinary Epidemiology. Engineering. 2020;6(1):20-25. doi:10.1016/j.eng.2019.10.004

<sup>2</sup>Hovingh E. Biosecurity - A Practical Approach. Penn State Extension. Updated: September 13, 2016. <https://extension.psu.edu/biosecurity-a-practical-approach>.

<sup>3</sup>Sanderson M. Biosecurity for Cow-Calf Enterprises. Food Animal Practice. 2009;594-599. doi:10.1016/B978-141603591-6.10113-7.