

Understanding Vaccination Versus Immunization

The importance of prompt treatment in supporting the health of your feedlot

Bovine Respiratory Disease (BRD), one of the most common and costly diseases on the feedlot, continues to present challenges as feedlot personnel strive to reduce its occurrence. While prevention is much more ideal than treatment,¹ for both the animals and your personnel, it is still important to understand all the options you have to treat and prevent disease. The better you understand the health of your cattle and the ways you can help support their health, the faster you can respond to illness or cases of BRD and keep healthy cattle in your pens.

Vaccination Versus Immunization

Vaccination and immunization are related, but they are not the same.

While vaccines do not treat diseases, they are important tools that can help prevent disease in your livestock. Vaccines are designed to stimulate a healthy animal's immune system to fight off pathogens, bacteria and viruses.²

Immunization is the process that occurs after vaccination—created when cattle properly respond to a vaccine, which can only happen under the right conditions.³ Vaccines must be safely stored, handled and administered in order to stimulate immunization, and they must be given to your cattle under the proper conditions.² Stressed, dehydrated, malnourished and diseased cattle are not as likely to respond to a vaccine and bring about immunization.³

A comprehensive vaccination program can be a key step in helping prevent disease in your cattle.² The best place to start when considering a vaccination program and protocol is with your veterinarian(s) and feedlot personnel.

Prompt Treatment

When BRD does occur on the feedlot, prompt treatment is key to reducing the likelihood of your cattle developing chronic illness,



morbidity (severe illness) and mortality. Prompt treatment is also critical to ensuring that disease outbreaks do not spread throughout your operation.

A complete health plan can support prompt treatment and overall animal health and help ensure that you have the right response plans in place when disease or illness does occur. You can work with your veterinarian, or veterinary team, to establish a health plan that covers the basics of disease prevention. Your complete health plan should address the following:⁴

- **Biosecurity:** Includes a vaccination protocol that considers the specific risk factors of your operation (including the size of your operation and potential disease risks) and a plan to minimize the spread of germs through testing and isolation plans.
- **Sanitation:** Includes routine cleaning procedures for all equipment and a manure management program to minimize the spread of germs throughout your operation.
- **Parasite Control:** Includes the establishment of protocols for effective de-worming and the use of sanitation and parasite control products.
- **Cattle Records:** Establish methods of evaluating the performance of your cattle and your overall operation including records around growth, nutritional needs, mortality rates and more.
- **Disease Treatment:** Establish protocols for treatment including vaccination plans and procedures for the use of specific products. This plan should be routinely reviewed with your veterinarian(s) and strategies should be updated according to the unique needs of your operation.

Prompt treatment is critical to reducing chronic illness, morbidity and mortality on the feedlot. Establishing a comprehensive vaccination and health plan with your veterinarians supports prompt treatment and helps reduce the risk and spread of disease.

Sources:

¹ Armstrong, J. (2023). 10 Things to Improve Feedlot Performance. University of Minnesota Beef Extension. [10 things to improve feedlot performance | UMN Extension](https://www.beefextension.com/10-things-to-improve-feedlot-performance/)

² Smith, J. (2023). Vaccination Programs for Beef Cattle. Merck Manuals. <https://www.merckvetmanual.com/management-and-nutrition/preventative-health-care-and-husbandry-of-beef-cattle/vaccination-programs-for-beef-cattle>

³ Schefers, J. (2012). Priorities that Impact Feedlot Health. The Cattle Site. Global Ag Media. <https://www.thecattlesite.com/articles/3213/priorities-that-impact-feedlot-health/>

⁴ Larson, B. (2023). Establish a Complete Herd Health Plan. Bovine Veterinarian Magazine. Farm Journal. <https://www.bovinevetonline.com/news/education/establish-complete-herd-health-plan>