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Question: What is preconditioning? Do you recommend it for the average cow/calf producer?

Answer: Preconditioning is an effort to prepare young cattle for the marketplace of optimal health and ability to withstand the stresses associated with leaving the home farm, passing through various trade channels, and adjusting to a new environment. After calving and weaning, this transition is one of the most stressful events that cows might experience in a lifetime. Most of these calves are destined for the feedlot where there is overwhelming evidence that preconditioned cattle significantly outperform those that are not. Advantages include less shrinkage, increased average daily gain, less total days on feed, lower disease incidence with associated costs of medicine, labor, facilities, and mortality, and increased percentage that grade choice.

Preconditioning is a protocol that establishes specific requirements for management procedures and their timing, vaccinations, and sometimes nutrition. The objective is to protect calves from diseases they might encounter and to acclimate them to the environment and feed of their next home. With growing popularity, there are a multitude of programs offered by state beef and veterinary associations, Extension Service, private marketing alliances, and branded product retailers. Some require third party certification usually by a veterinarian, and some require specific records of dates, procedures, products used, and even genetics. The best program is one tailored to your farm and your intended market.

I implore producers to think of preconditioning not as a set of rules but rather as a concept. Let's back up to the fundamentals of good husbandry and remember that cattle are most content with the herd and without changes in their daily, consistent routine. Happy cows are healthy and productive. To maximize health, our goal is to perform necessary changes and procedures in small incremental steps. It is best if we can avoid multiple stressors at one time and can allow for a recovery period (return to the routine) between them. In Vermont, success depends heavily on good fences, facilities, and our ability to work cattle in a calm and gentle manner.

Preconditioning is not for everyone. While some of the principles may enhance the success of an average cow/calf operation, one must consider the costs, the facility and labor requirements, and the potential benefits of subscribing to a specific program. There are three situations where I think preconditioning is worthy of consideration. The farm or ranch which places high priority on offering the healthiest cattle possible that perform maximally at their final destination is such a case. If motivated by pride in one's effort or a desire to establish a reputation in the marketplace, this is a tool to help achieve that end. It is not uncommon for producers of quality seedstock, broodstock, stockers, and feeders to be sought after by buyers for repeat business. Secondly, I would strongly encourage any producer who decides to retain ownership to consider preconditioning. While the benefits of this effort are generally reaped by the buyer or the recipient of cattle, in this case you remain the beneficiary. Perhaps the most common reason to precondition cattle is that your chosen market requires it and/or recognizes the "added value" with premiums or other financial incentives. The numbers vary widely so suffice it to say that the costs of preconditioning range from one to ten dollars per hundredweight and gross returns fall into the same range. From a business perspective you must know your costs and your market. A good starting point for help with this kind of analysis is the Extension Service and your veterinarian.

The following is a basic preconditioning program that I use as a baseline. It is intended to

be modified as needed or required to suit the individual farm and the expectation of the market

REQUIRED

Weaned 45 days

Dehorned , castrated, and healed

Vaccinated and boosted 3-5 weeks later or according to label instructions

IBR, BVD, PI3, BRSV. Modified live whenever appropriate

Leukotoxoid pasteurella (manheimia) vaccine

Avoid vaccinating during times of stress, such as surgery and/or weaning

RECOMMENDED

Clostridium 7 way vaccine with booster

Hemophilus vaccine with booster if this has been a documented problem on your farm or if recommended by your veterinarian

Deworm at first vaccination – internal and external parasites

Adjust ration during background period to prepare cattle for feedlot. Teach cattle to use feedbunks and water tanks or fountains

Castration method of choice is by knife

The earlier the age at castration and/or dehorning, the better. (3days to 3 months acceptable)

COMMENTS

Name of vaccine, serial number, date and person administering vaccine should all be documented. All animals should have clear and permanent identification.

Vaccinations are most effective when initiated after 4 months of age but at least two weeks prior to weaning. Planning so that boosters are given before weaning is ideal, given at weaning is often acceptable, and given at least 2 weeks after weaning is also effective.

Many modified live vaccines are not labeled for use in calves nursing pregnant cows. Killed vaccines may be used when vaccinating pre-weaning.

All injections should be given in the neck region in front of the shoulder blade. Use sub-Q injection whenever appropriate.

Pasteurella hemolytica (now called manheimia) is the most common bacteria in the Bovine Respiratory Disease Complex causing shipping fever. The pathogenicity of pasteurella multocida is debatable, certainly hemolytica is life threatening. This bacteria is part of the normal flora of a cow's respiratory tract. It generally causes disease in conjunction with viral infection or when the animal is immunosuppressed due to stress.

Booster vaccinations for products that don't require boosters by label are given to protect animals that didn't respond to the first injection.

Hemophilus somnus has long been recognized as a possible component of BRD complex. The efficacy and possible immunosuppressive effects of this vaccine remain under debate.