Growing Beef

Iowa Beef Center's monthly newsletter @ Iowa State University

November 2008 • Volume 1 Issue 4 • www.iowabeefcenter.org • beefcenter@iastate.edu

Creating a receiving program for healthy cattle

SHAUN H. SWEIGER
VETERINARIAN
IOWA STATE UNIVERSITY

TERRY ENGELKEN
VETERINARIAN
IOWA STATE UNIVERSITY

Fall is here – the landscape is colorful, the weather is changing, the calves are bawling, and it is busy time of year for the feedlot! Many of you are already "in the battle" and facing the challenges of fall and for some of you, the fun is just beginning.

As we talk about fall animal health issues, let's begin with receiving. It is extremely important to get cattle off to a great start. We often refer to this as the "R" equation (Rest + Rehydration + Replenishment = Response). If we expect the cattle to respond to the products we administer, we must first make sure we have addressed the above issues adequately. Do the cattle have access to fresh, clean water and fresh, palatable feed? Have the cattle had adequate rest or the opportunity to recover from the stresses of transport, weaning, etc.? How much rest (time) do they need?

The dilemma is that many of the diseases we are vaccinating against have very similar incubation time frames to the time it takes for our vaccine to create protection. This becomes even more complicated when we take into consideration the source/origin of the cattle, their length of time in transit, and their level of stress (freshly weaned, weather conditions, comingled, etc.).

Because of this, we recommend letting the cattle dictate the timing. Process the cattle when they have had the opportunity to lie down and rest, get up and eat and drink, and appear "settled." Pay attention and observe their movements and behavior – they will let you know when they are ready. This rest time will be typically 12 to 36 hours. During this "observation" period, you will also have a better opportunity to properly assess or classify the level of health risk and identify any individuals with preexisting sickness or injuries. These individuals often get overlooked during unloading or arrival because when an animal is stressed, it will do an incredible job of hiding a problem due to the "prey" instinct.

Now that we have the cattle assessments completed, it's time to decide which products we are going to administer. The best resource for these decisions is your veterinarian, who has a great understanding of the products and what disease concerns are in your area.

Important considerations for feedlot receiving protocols would include: Modified-live viral (MLV) products containing IBR, BVD (Types 1 & 2), PI3, BRSV, blackleg vaccines, dewormer, implant, and form of identification (ear tag).

Your veterinarian would also be your best source of information as it relates to metaphylaxis, revaccination, and treatment options. These options will vary based on cattle characteristics, your cattle handling facilities, and hospital design. However, if we expect the health program to work effectively we can't forget the animal husbandry issues. Consider all of these factors when designing your receiving program in order to optimize animal health.

timely tips

Keeping Feedlot Animals Healthy

Top tips to take away from this article:

Prepare your cattle for vaccinations
Make sure your cattle have access to fresh feed and water, as well as adequate rest from recent weaning, transport, etc.

Assess your cattle's health
Observe your new cattle for health risks and preexisting conditions.

Talk to your veterinarian
Your veterinarian can help you understand proper health products and treatments, as well as any disease concerns in your area.

Decide which products to administer
With your veterinarian's advice, decide which products need to be administered to your animals as part of your overall feedlot receiving program.

IOWA STATE UNIVERSITY
University Extension
Helping you become your best.

Getting to know an IBC beef specialist

Beth Doran

Counties served: Cherokee, Crawford, Ida, Lyon, Monona, O'Brien, Osceola, Plymouth, Sioux and Woodbury

What do you enjoy most about your position as beef specialist?

I really enjoy the people I work and interact with – my beef producers and allied agri-business staff. They are great people – dedicated to the beef industry – that have a vast amount of experience and knowledge, but also complex questions. It's rewarding to help them find solutions to these questions and be successful.

What health concerns should producers be watchful of during winter?

A lot of the health problems in the winter are related to changes in the weather. In feedlots, maintaining a constant dry matter intake becomes more challenging. Windbreak protection and bedding are "musts" for cattle. Cold winds and surfaces will reduce feed efficiency in all cattle. Cold surfaces can also lead to frozen teats in breeding females and reproductive problems in bulls.

What best advice can you offer for feedlots hoping to maintain the health of their new cattle?

It's important to give the calf a "good start." Key to this is making sure it has been vaccinated, treated for external and internal parasites, castrated (if a bull), de-horned (if needed), weaned at least 30 days (better if 45 days), and is bunk adapted prior to entering the feedlot. This describes the calves that will be offered this fall and winter in "pre-conditioned" feeder calf sales across Iowa.

Another key is to make ration changes gradually - whether it is changing the energy density of the ration or increasing feed intake. Rapid changes can be expensive when performance is reduced or animal health is compromised.

Cattle feeding is as much an "art" as a science. This means paying attention to the details and reducing potential stressors. The old term "the eye of the master" still applies to cattle feeding!

Role of cattle health and treatment in feedlot profitability

TERRY ENGELKEN
VETERINARIAN
IOWA STATE UNIVERSITY

SHAUN H. SWEIGER
VETERINARIAN
IOWA STATE UNIVERSITY

Traditionally, when feedlots evaluated animal health performance, they concentrated on death loss and treatment costs. These are two measures that are directly tied to health performance and they are relatively easy to track. This emphasis has now expanded to include additional measures that will enable the feedlot operator and their veterinarian to fine tune animal health protocols. The timing of morbidity, percent treated, first treatment response, and case fatality rate, is all important in determining the success of the animal health program. Necropsy results on dead calves should also be incorporated into the decision making process.

Recently, there has been more information produced looking at the effects of animal health on feeding performance and carcass characteristics. Data from both Oklahoma and Iowa have shown a direct relationship between the number of times a calf is treated and the detrimental effects on performance and profitability. This data clearly shows that the costs associated with this decrease in performance spiral upward the more times a calf is treated.

The included table (Table 1) was generated from feedlot cattle in southwestern Iowa. It compares performance between calves that were not treated (NT), those that received a single treatment (ST), and those that were treated at least twice (2T). If you consider the performance of the untreated cattle as "par," you begin to see the penalty that we to pay for cattle that need to be treated. In this data set, calves that were treated twice or more were worth $200 less than calves that were not treated. This is primarily due to the increased cost associated with death loss, treatment cost, and reductions in ADG and carcass quality.

Losses associated with feedlot sickness go far beyond just the cost of treatment. As cattle require more treatments we consistently see higher death loss, poorer feeding performance, decreased carcass quality, and lower profitability. This places the emphasis on purchasing cattle with a known health history whenever possible. Your receiving program for newly arrived cattle needs to give the calf a chance to rest, rehydrate, and recover from the stress of transport. Proper vaccination protocols go hand in hand with good animal husbandry. Being able to consistently identify sick cattle early in the disease process will ensure that treatment protocols will work effectively and decrease the need for retreatment. The end result will be calves that require fewer treatments and perform at a higher level.

Table 1: Impact of treatments on potential profit

	Number of treatments		
	NT	ST	2T
Death loss discount, $	PAR	– 31.07	– 100.04
Treatment cost, $	PAR	– 20.60	– 48.43
ADG reduction, $	PAR	– 24.49	– 35.71
Yield grade premium, $	PAR	+ 2.90	+ 4.59
Quality grade discount, $	PAR	– 10.39	– 19.41
Light carcass discount, $	PAR	– 1.55	– 1.58
Dark cutter adjustment, $	PAR	+ 0.18	– 0.58
Total difference, $	PAR	–85.02	–201.16

Busby (2006)

… and justice for all
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914 in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.