

Beef Talk: vaccinate and prepare valuable calves for market

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Vaccinate calves now in anticipation of weaning and preparation for sending the calves to market. I hope the calves already have had some vaccinations during branding or early summer cattle work. Now would be a good time to do booster vaccinations.

If the calves have not been vaccinated, now would be a good time to establish a vaccination plan with your local veterinarian. The Dickinson Research Extension Center, in response to the recommendation of our local veterinarian,

uses vaccines as an aid in preventing infection with the infectious bovine rhinotracheitis (IBR) virus, bovine viral diarrhea (BVD) Type II and bovine respiratory syncytial virus (BRSV).

These vaccines also aid in the control of BVD type I and the bovine parainfluenza-3 (PI₃) virus, as well as the bacterial agents *Pasteurella haemolytica* and *P. multocida*.

Agents that cause disease typically are present and will affect calves negatively, particularly during times of stress. Vaccines that offer protection from disease-causing agents are readily available as combination vaccines and are named within cattle circles by the numbers of diseases that each product offers as protection.

For example, a product containing four agents (thus the common saying four-way) provides protection against four disease-causing agents and is available from several vaccine

Check Which Diseases Your Calves are Protected From:	
<input type="checkbox"/>	Blackleg (<i>Clostridium chauvoei</i>)
<input type="checkbox"/>	Malignant Edema (<i>Cl. Septicum</i>)
<input type="checkbox"/>	Black Disease (<i>Cl. Novyi</i>)
<input type="checkbox"/>	Gas-gangrene (<i>Cl. Sordellii</i>)
<input type="checkbox"/>	Enterotoxemia and Enteritis (<i>Cl. perfringens</i> types C and D)
<input type="checkbox"/>	Haemophilus (<i>Histophilus somnus</i>)
<input type="checkbox"/>	Infectious Bovine Rhinotracheitis
<input type="checkbox"/>	Bovine Viral Diarrhea type I and II
<input type="checkbox"/>	Bovine Respiratory Syncytial Virus
<input type="checkbox"/>	Parainfluenza 3
<input type="checkbox"/>	<i>Pasteurella</i> (<i>Mannheimia haemolytica</i>)

companies and in several product formulations. Killed and modified-live virus (MLV) products are available and need to be administered according to the well-displayed, easy-to-read labels that the companies provide.

In addition to the previously mentioned viral and bacterial agents, the center also vaccinates all the calves with a seven-way clostridial bacterin-toxoid, including blackleg caused by *Clostridium chauvoei*; malignant edema caused by *Cl. septicum*; black disease caused by *Cl. novyi*; gas-gangrene caused by *Cl. sordellii*; and enterotoxemia and enteritis caused by *Cl. perfringens* Types C and D, plus *Histophilus* (*Haemophilus*) *somnus*.

Some ranchers would say that is enough. In fact, some would say there isn't a need to vaccinate. That simply is not true. All cattle need protection from the various pathogenic agents that exist if there is going to be a potential for exposure.

The first question always is health, but unvaccinated cattle can be and generally are very healthy. You don't find disease-causing agents everywhere. However, when they are present, they will do some damage, so the second question is about risk.

Unvaccinated calves have a greater risk of developing an illness with greater morbidity and mortality

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when they have no immunity to the pathogenic agent present. Good business sense would then say to vaccinate the calves if a vaccine is available. Good health can be achieved without vaccinating the calves. However, this places the calves at a higher risk of developing a health issue. This concept is not new because weaning protocols go back a long time. The North Dakota Beef Cattle Improvement Association's (NDBCIA) Green Tag program was an early trendsetter.

Quoting from an old Green Tag program brochure that was produced for the NDBCIA in the late 1980s, "Preconditioning includes a complete health-management program that prepares the calves to better withstand the stress and adjustment they need to undergo when they leave the home farm or ranch in route to the feedlot. Calves are castrated in most cases, dehorned and vaccinated against common shipping and feedlot diseases, treated for grubs and lice, and had the opportunity to accustom themselves to water troughs and feed bunks. Additional practices are encouraged that include implants that stimulate the natural growth processes, complete herd-health programs within the cow herd, and strong relationships with professional veterinarians and animal scientists."

One could assume that not much has changed. The principles are the same, which means protecting the calves is paramount, and this protection needs to start with a strong calf vaccination program. This is followed by a preweaning vaccination protocol and vaccinating again at weaning.

With improved vaccinations available and more vaccination programs easily attainable, it is very important that producers follow label directions and protocols developed by the vaccine producers and their local veterinarian.

The end result is calves that can withstand the rigors of life without mom and easily adapt to any calf system. Those calves are very valuable in today's market.

May you find all your ear tags.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the NDBCIA Office, 1041 State Ave., Dickinson, ND 58601, or go to www.CHAPS2000.com on the Internet.