



BeefTalk 680: 1 Percent Is Good Money Spent to Protect Calves

SUPPORTING MATERIALS



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Cost versus income always is key, but cost versus prevention also is important. In other words, producers spend money to make money and spend money to protect money. Both costs are relevant.

In reviewing the Dickinson Research Extension Center's calf vaccinations, the calves were vaccinated during early summer to protect against the common pathogens that like to kill calves. Of the two vaccinations, one cost \$3.20 per calf and the other 86 cents for a total of \$4.06.

These same calves will receive a booster vaccination prior to weaning, which will be followed by a weaning booster. Those two may be delayed depending on the location of the calves and how convenient or accessible the calves are. Either way, they will get a second and third booster.

The level of protection and efficacy of the vaccination will vary depending on how the calves are managed and handled throughout the preweaning, weaning and postweaning period. The less stress, the better. The appropriate vaccination program should be chosen in consultation with a veterinarian and designed to match the producer's marketing protocols.

The center maintains and overwinters all calves, thus the desire to achieve maximum immune response to the veterinarian's recommended vaccinations. These vaccinations provide protection against infectious bovine rhinotracheitis virus, bovine viral diarrhea type II and bovine respiratory syncytial virus.

These vaccines also aid in the control of bovine viral diarrhea type I and bovine parainfluenza 3 virus, as well as bacterial agents *pasteurella haemolytica* and *pasteurella multocida*.

The clostridial bacterin-toxoid includes 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



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caused by *Cl. perfringens* types C and D, plus *histophilus (haemophilus) somnus*.

The total bill for this protection would be \$12.18 but offers protection to a calf that has a value of \$1,000 or more. In simple terms, a little more than 1.2 percent of the value of the calf is invested in preventive vaccinations. Put another way, the money invested in 100 calves will pay for itself by saving one calf.

Unfortunately, pathogens generally are not very kind and can kill one calf or multiple calves from the inventory. Also, if a pen of calves quits gaining weight at 2.5 pounds per day, the producer still loses the equivalent of a calf every four days. A pen of sick calves is not a desired outcome to weaning. However, many producers still choose not to vaccinate.

Granted, the costs are more than product costs because labor and handling are not cheap, either. However, in the big picture, the cost of prevention is critical to lower the risks and protect assets.

Because the center maintains calves into the following grazing season, additional protection is given as the calves complete their winter phase. Protection against anthrax was 74 cents, pinkeye protection was 94 cents and foot rot protection was \$1.18. By the time the yearlings are settled, each calf has an additional \$2.86 in vaccination costs, which brings the total for this year to \$15.04.

As the center starts to make arrangements for pulling the yearlings in for finishing, yearling values are \$1,300 to \$1,400 per head, so now the total vaccination costs are 1.1 percent of the value of each calf.

Depending on how an operation is managed, the opportunity to vaccinate may not always be obvious. However, managers need to ask: If the cattle are available and being handled, would that time be appropriate to add a vaccine to the daily work protocol to add some health protection?

By combining activities and taking advantage of cattle movement, added protection from aggressive pathogens can make for a better cattle operation. How much better? One really never knows because it is unknown what pathogens are present and at what level or force they are ready to attack.

Stressed cattle with poor immune systems will succumb to pathogens quickly, while a set of unstressed cattle may not show ill effects, given the same exposure to the pathogens, but may slow down gaining weight to bolster their immune defenses. A set of unstressed, fully vaccinated cattle may not even notice the exposure because their immune systems already are up and established.

The bottom line is that investing 1 percent of a calf's value for protection against pathogens makes good cow sense.

May you find all your ear tags.

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

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