

Implementation of a BVD Bio-Security Program in a Feedlot My Experience

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Riding pens gives a person a lot of time to think. And, in November of 2002, when I was following 50 head of sick calves up the alley on their way to the hospital, I was thinking, “there has to be a better way to do this.” Due to the educational efforts of Dr. Bill Kvasnicka, Nevada’s extension veterinarian, I was becoming increasingly aware of BVD. I knew there were persistently infected cattle; and, I knew they were a major source of BVD virus. I was also starting realize that some of the diers (that is technical feedlot jargon for the sorry little buggers into which we pour hundreds of dollars worth of medicine and they die to spite us) were probably PI animals.

We have a 5000 head feedlot that has evolved over the past 35 years from a small finishing lot to a backgrounding lot , and then to a breeding stock development center. Additionally, 7 years ago we started a bull test and sale. Bulls require much more room than feeders, so our capacity, practically speaking, is 3000 head. Each month I send out 100 feedbills – which means our average lot size is 30 head. This number varies from 1 to 500. Imagine how it feels to call a seedstock producer and tell him that his one bull just died. From a health standpoint, I have a tremendous amount of co-mingling and a huge variation in management and vaccination practices. Because almost all of the cattle are purebred cattle, I do not have the disease resistance afforded by heterosis.

I called Dr. Bill and asked him what he thought about making PI testing a prerequisite for entering the feedlot. He called Dr. Julia Ridpath and they helped me work out the details of the program. I required that all animals be tested and isolated from known PI’s and untested animals for 30 days prior to feedlot arrival. The response varied from customers who opted to take their cattle elsewhere to customers who complied kicking and screaming to customers who participated whole heartedly. In January of 2003 we tested every animal already in the lot and on March 1 the testing requirement went into effect.

When we tested the 3000 animals at the lot, we found 6 PI animals. We removed these from the feedlot. Each of those animals came from a lot in which we had had a high level of sickness, strengthening my belief that we were doing something that would benefit our customers. Two of those animals were purebred bulls and were destined to be sold to commercial ranchers.

Our advertising campaign for our March bull sale that year leaned heavily upon the BVD program. Senior editor of *Beef* magazine, Clint Peck wrote about our program. Kelli Toledo, editor of the California Cattleman magazine gave us considerable coverage and published informational articles about BVD. Dr. Ridpath and Dr. Bill further supported the project with superb presentations about BVD at our bull sale seminar. As result, many of the California breeders and some of the consignment sales jumped on the band wagon and are requiring BVD testing.

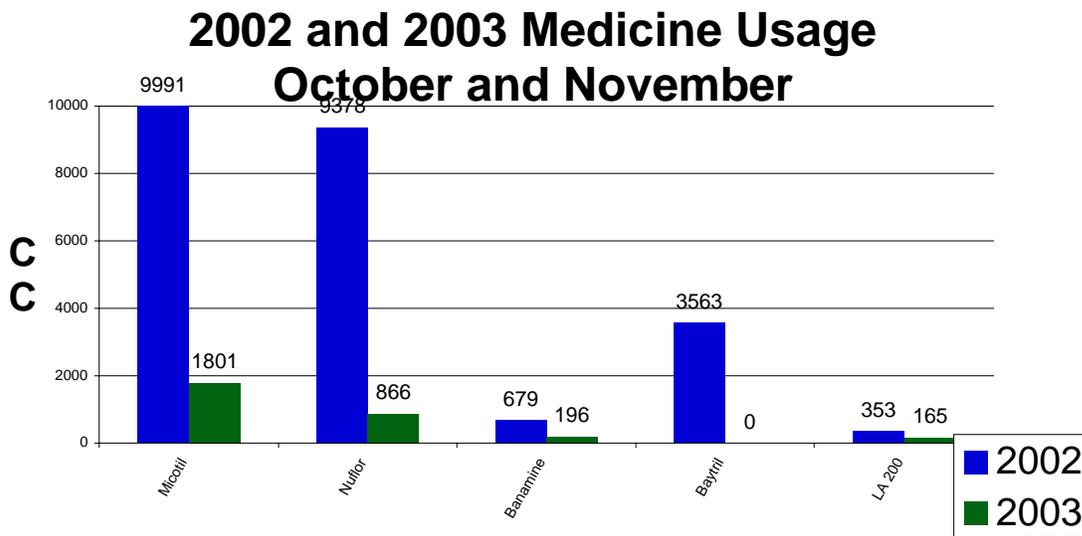
In April, At Dr. Ridpath’s request we pulled some blood and semen samples from pen mates of the PI bulls. It was approximately 90 days after we had removed the PI animals. Although the BVD virus could not be found in the blood of any of these animals, it was found in semen. The implications of this finding greatly reinforced my belief in our biosecurity program. I realized that

- ✓ A PI bull could have been sold into a BVD free commercial herd.
- ✓ A pen mate of the PI bull could expose a herd to BVD through his semen

- ✓ The 1500 heifers in the lot had probably been exposed to BVD PI animals. Because the PI's were removed in January and breeding season started on April 1, I felt we were safe. However, I was acutely aware of what had probably happened in previous years.

We faced some difficulties in implementing the program. The 30-day requirement was very difficult for some ranchers to implement. Many were calling each day to see if we had received lab results so they could order a truck. To help our customers get going in the program, we accepted some non-tested cattle and quarantined at a facility a mile away from the feedlot. I learned that cattlemen are superb at the “give them an inch and they will take a mile” philosophy. They conveniently ignored the 30-day requirement. And, I had to stay in business, so I worked with them on that issue.

We did have challenges, but we also enjoyed some spectacular successes. Here is the data from the medicine use in the feedlot in comparable months before and after we established the bio-security program.



Here also is a dramatic demonstration showing the medicine usage and mortality data on the same set of commercial calves 2 years apart. The first year was before we began testing. I was pretty certain that we had a BVD problem in this herd. Sure enough, 6 PI animals were found in the next years’ calves. As I said, the results are dramatic.

Case Study

2003 Untested Lot

482 Steers
 Unknown PI+ count
 3 Dead - Suspected PI+
 \$4213.13 total med. cost
 \$8.80/head med. cost

2004 Tested Lot

337 Steers
 6 PI+ separated from others
 2 Dead - PI+ steers
 \$137.47 total med. cost
 \$0.42/head med. cost

One and a half years after implementing the program, we had a PI animal sent in behind our back. The heifer was a just-purchased show animal. The owner ear-notched her and, without waiting for lab results, put her on the truck with 47 other heifers and 26 bulls. The lab report showing a positive PI arrived on the same day that we pulled the heifer to treat her. We removed the entire pen of heifers to a corral a mile away from the feedlot. The bulls had been mixed into a pen with 115 other bulls from the same ranch. The per head medicine cost in the heifer pen was \$14.90 - historically high for this ranch. I am certain that removing them from feedlot exposure saved us from a worse wreck. By the time we were aware that we had a PI, we were also starting to pull sick bulls. The bull pen had a per head medicine cost of \$12.89 – again, high for this ranch. Even though exposure to the 26 bulls was only during the time the cattle shared a truck (6-7 hours) we experienced a substantial wave of sickness in the bull pen. Many of 26 new arrivals were treated and about 10 % of the cattle which had already been in the pen were pulled. A week or so later the pens on either side of the bull's pen experienced a small wave of sickness.

One of the stark realities about this heifer is that she was a show heifer and exposed dozens of valuable females and their developing embryos to BVD. BVD testing should be a requirement at every stock show in the country.

The non-compliance was frustrating to me. So, a year ago, I established some financial incentives. Meeting the 30-day isolation requirement earns a \$2 per ton feed discount. And, complete herd BVD eradication earns a \$5 per ton feed discount. This equates to nearly \$30 per head discount on a bull that is sold as a long yearling. We are just now, in our third year of the program, convincing our customers to test their calves in a pre-breeding season protocol – before the bulls are turned out with the cows and a new batch of PI calves can be created.

In November, the Nevada Cattleman's Association resolved that the State Veterinarian should establish a BVD certification program similar to the Colorado program. And, California cattlemen adopted a resolution urging producers, veterinarians, and educational institutions to support a voluntary BVD eradication program. As these programs are developed, state or veterinarian certification will become the determining factor in the feed discount my customers can earn. As more customers implement complete herd BVD control, the feed price for non-compliance will continue to increase. We will effectively increase the incentive for BVD control.

Ranchers believe that BVD is something that happens in the other guy's herd. Generally, finding a PI animal greatly increases the level of BVD awareness and greatly enhances biosecurity practices.

My biggest frustration has been the lack of knowledge about BVD among practitioners. Massive industry and veterinarian education needs to take place. I have had an innumerable number of customers call me and tell me that their vet said they have been vaccinating for years and are sure the herd is BVD free. I have had vets tell customers with PI animals that getting rid of the dam will eliminate the problem. Even among veterinarians, the learning curve improves dramatically once they find a PI in their own herd.

I naively expected my customers to all see what a brilliant idea I had and to enthusiastically participate. The initial successes have given me the incentive to continue with the program. Our overall feedlot health has improved dramatically since we implemented the program. We traditionally celebrated Thanksgiving by doctoring 60-100 head of sick cattle. Since I implemented the program the Thanksgiving day sick pull has been 12-15 head.

We still have a few herds in which we have very high morbidity rates. About half of these herds are herds in which we found a PI animal sometime during the past 3 years. Most of these owners are sharply aware of contact with neighboring cattle over which they have little control. In time, with the increase in education and financial incentives, I believe that we will have a customer base of BVD free herds and these problem herds will no longer be problems.

I know that the scientific community does not all agree that we can eliminate this disease. But, very few will argue against the belief that we can make a huge reduction in the level of BVD in our cattle. Insanity is defined as doing the same thing and expecting the results to be different. As an industry we have been living with BVD for many years. With the technology in place to eliminate PI animals and vastly reduce the incidence of BVD, it would be insane to keep living with BVD.