

## BVD: Is it worth the gamble?

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**Statistically speaking**, the chances of having a bovine viral diarrhoea virus (BVD) outbreak on your operation are low. But any producer that has faced the harsh reality of a BVD outbreak likely doesn't consider this any consolation. Firestorms of BVD caused abortions, calf mortality and plummeting conception rates have a significant and direct economic impact. Add in the costs associated with secondary infections and a decreased replacement pool, and BVD can cause even well managed, profitable operations to re-think being in the cattle business.

"Not worried," you say, "after all I vaccinate every year." Indeed, vaccination is an essential element of a control program, but before you put all your chips on vaccination, consider these facts.

1. Like flu vaccines, they only protect against the strains present in current vaccine batches. Unfortunately, the number and variety of BVD strains are unknown, and viral mutation continues to produce new strains on an ongoing basis.

2. Vaccination is most effective in animals with healthy and active immune systems. Anything that hinders appropri-

ate responses of the immune system will have a negative impact on the effectiveness of vaccines.

Unless a rigorous biosecurity program, including quarantining and testing new additions, is in place, don't count on lady luck to protect you. Persistently infected (PI) recent herd additions are often at the root of outbreaks. The severity and duration of consequences depends on how quickly the breach is detected since exposure is nearly continuous in proximity to PI animals. Are you gambling with your recent purchases?

In January, AntelBio will offer new tools to assist in screening and control of BVD. The first is a PCR test that detects DNA from the virus in pooled milk samples such as a bulk tank or groups of DHI samples. The second is an antigen ELISA that can be used to detect the virus in individual samples of blood, milk or tissue (ear notch). The last tool is a sample collection and shipping system for taking ear notch samples for ELISA testing. Collectively, these tools can be used to address any BVD situation that may ante up.

### Screening the milking herd

Screening your bulk tank on a regular basis by PCR is an effective biosecurity measure to detect the introduction of PI cows in expanding milking herds. While this doesn't address PIs in young replacements and bulls, it is a simple process that can assure no PI cows have slipped through other control practices. This

does NOT replace a recommended calf testing program in herds at high risk of acquiring or harboring BVD infection.

### Identifying PI cows

If a bulk tank PCR detects PI animals have circumvented your biosecurity system, AntelBio has revolutionized strategies for finding individual PI cows. In the past, finding a PI cow in a herd would have meant an investment in veterinary assistance to collect (at an additional cost to cow comfort) and analyze serum or tissue samples from every lactating cow. A conservative estimate for the cost of this process in a herd would average \$10 per animal. By using milk samples from DHI and AntelBio's new tools, an entire milking herd can be evaluated to identify PIs for approximately \$3 per animal, without any added time or disruption of daily routines.

### Calf testing program

It is imperative that a calf testing program be implemented in any herd suspecting BVD. The advantage of testing calves is that in most cases your winnings are doubled, i.e., two test results for the price of one. If the calf tests negative for BVD, then her dam is negative; if the calf is positive, then her dam should be strongly suspected for BVD.

Ear notching calves can easily be incorporated into an existing calf management program with a sampling and shipping kit from AntelBio. Simply collect an ear notch from each calf and store frozen until shipment to the laboratory for testing. All necessary supplies and shipping are included in the kits, which can be cycled between farm and laboratory for the duration of the testing program.

If you want to avoid a high stakes game against BVD, or you are afraid you are already in one, bring AntelBio to the table. We have the tools to ante up and improve the odds against this unworthy opponent. ★

