# BVD (Bovine Viral Diarrhea) Virus Control and Eradication Stocker / Feedlot Production: Version 1.0

### **Key Points**

- Cattle persistently infected (PI) with BVD virus are the primary source of BVD virus in stocker and feeder cattle
  operations.
- Vaccination is a tool to manage BVD, but it cannot be relied upon to prevent disease if PI cattle are present.
- Vaccination should be used to decrease clinical disease and to reduce the risk of viral shedding within and between groups of stocker or feeder cattle.
- Options to prevent or minimize the contact of PI animals with other stocker or feeder cattle include: purchasing testnegative or low BVDV-risk cattle, test and removal prior to delivery, or test and removal at arrival.

## Background

- PI cattle are the major source for BVD infection and disease in cattle that come in contact with them. PI cattle became
  infected before they were born (before 125 days of gestation) and shed huge amounts of BVD virus throughout their lives.
- Any feeder animal can become temporarily infected with BVD virus for a few days to weeks until their immune system can clear the virus. The disease is usually not fatal by itself, but BVD virus suppresses the immune system and makes infected cattle susceptible to diseases such as pneumonia, scours, footrot, and others.

# **Designing Best Plans for BVD Control and Eradication Strategies**

- Meet with your veterinarian to determine or review your BVD goals and discuss control options
  - Consider sourcing previously tested cattle
  - Consider arrival testing
  - Initiate or continue a modified live (MLV) vaccination program
- Euthanize or isolate PI cattle away from other cattle
- Discretely inform the source of cattle when PI test result is positive (may involve veterinarian to veterinarian contact)

"In our trial, five of 24 — or 21% of the test pens — had at least one PI animal," Hessman says (Dr. Bill Hessman, Haskell County Animal Hospital, Sublette, KS).

BEEF Magazine, June 1, 2005

BVDV-PI cattle are more likely to become chronically ill or die than non-BVDV-PI cattle. Also, the probability for initial treatment with respiratory disease was 43% greater for cattle exposed to BVDV-PI cattle in the same pen or an adjoining pen.

Loneragan; Journal of the American Veterinary Medical Association, 2005

# **BVD Myths**

#### • PI calves will be killed by MLV vaccination

Fact – Controlled experiments have not been able to induce sickness or death in PI calves following MLV vaccination. However, case reports indicate that MLV vaccination can cause a PI animal to become sick or to die - though far less than 100% are negatively affected..

## • PI calves will be thin, have a rough haircoat, and be a poor-doer

Fact – While many PI animals are unthrifty, reports have indicated up to 50% will appear normal and may enter the stocker operation in excellent condition. PI calves cannot be identified visually.

## • The greatest cost associated with a PI calf is the death of that calf

Fact – Increased sickness, treatment costs, treatment failure, and reduced gain in penmates appears to greatly exceed the cost of PI death.

## • BVDV won't affect my cattle because I vaccinate

Fact – The tremendous amount of virus secreted by a PI calf can overwhelm a level of immunity that is protective under less severe exposure.

Vaccination alone will not solve BVDV problems