

# Controlling BVD

2 p.m. session, Wednesday, Dec. 7, 2005

Presenter: Jim Kennedy, DVM, Colorado State University.

RAPID CITY, SOUTH DAKOTA (Dec. 7, 2005) — Colorado State University (CSU) Veterinarian Jim Kennedy is encouraged about the spread of knowledge regarding bovine viral diarrhea (BVD). He's particularly encouraged that it has been producer-driven. At the 2005 Range Beef Cow Symposium in Rapid City, Kennedy attributed this to the growing realization that BVD is not just a feedlot-related disease. It also depresses reproductive performance in cow herds, causing abortion, stillbirths or congenital abnormalities.



**BVD isn't just a feedlot disease; it depresses reproductive performance, causing abortion, stillbirths and congenital abnormalities, said CSU's Jim Kennedy. [PHOTO BY LYNN GORDON]**

"BVD is a very real issue for cow-calf producers," Kennedy said.

Current initiatives by the National Cattlemen's Beef Association (NCBA), American Association of Bovine Practitioners (AABP), the Academy of Veterinary Consultants and state livestock associations are seeking development of effective BVD control programs. Kennedy said objectives include effective vaccination programs and elimination of persistently infected animals, the most important source of exposure.

Kennedy told attendees there are two distinct types of BVD infections. Transient, or acute, infections occur when the virus is transmitted from one animal to another. Transiently infected animals may show symptoms and then recover, or they may succumb to other secondary infections, such as bacterial respiratory disease. Open cows frequently recover from transient infection. However, cows infected during pregnancy undergo a loss of reproductive efficiency or may produce the other type of infection — persistent infection (PI) — in their unborn calves.

PI animals are the result of fetal exposure to the virus prior to immune system development — approximately between Day 18 and Day 125 of gestation. PI calves may not show outward signs of infection but they shed the BVD virus profusely.

"Persistent infection never goes away, and these animals shed the virus at thousands of times greater levels than animals with transient infection," Kennedy explained.

"If that doesn't scare you, let's say you put a PI calf in a pen with 20 uninfected animals and then pull it out after one hour. After just one hour of exposure, all 20 of the other animals will have started to mount an immune response to BVD. That should scare

you,” Kennedy added. “We need to eliminate PI animals.”

Kennedy said BVD is economically important to the cattle industry. The cost of infection is estimated to range from \$10 to near \$60 per head for the cow-calf producer, and more than \$7 per hundredweight of gain for the cattle feeder.

Recognizing its importance, six states (Iowa, Nebraska, Wyoming, Colorado, Kansas and Missouri) are initiating BVD control programs, Kennedy shared. New technology for testing blood and skin samples are being used. The high sensitivity and low instance of error indicates the new testing procedure may be the key to effective BVD control.

— by Troy Smith, field editor, Angus Productions Inc.  
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