

# VETERINARY CALL

by Bob Larson, Kansas State University

## Understanding Calf Pneumonia

*Identifying and treating the most common reason for calf loss.*

Pneumonia in young calves is one of the most common causes of death loss between birth and weaning. One frustration is calves are spread apart on pasture and suckling their dams with little apparent stress, such as being trucked or changing their diet, and it would appear the risk of pneumonia should be low.

Although it is not always possible to identify why a herd experiences an outbreak of pneumonia in suckling calves, veterinarians who have studied the disease have found herds that experienced an outbreak of scours or that imported calves from other herds to graft onto cows were more likely to deal with the disease.

In addition, management strategies utilizing estrous synchronization or creep feeding causes calves to be gathered together, which appears to increase the risk of pneumonia. Calves born after a difficult birth and calves that failed to consume enough colostrum have been shown to be at higher risk of getting sick and dying before reaching weaning age. Veterinarians also indicated in a survey that bad weather, calving in confinement, failure to adequately vaccinate the herd and nutritional deficiencies were also suspected of contributing to the risk of calf pneumonia.

The most likely age for calves to

be diagnosed with pneumonia is between 70 and 150 days of age. Many times, the first sign a herd has a problem is when a calf is found dead. Because death in young calves can also be caused by other diseases such as blackleg, digestive tract disease or trauma, a veterinarian will probably need to examine the dead calf and may need to submit samples to a diagnostic laboratory to identify the cause of death.

Calves that show signs of pneumonia such as rapid breathing, laying down and being reluctant to rise, and high temperatures should be treated with an appropriate antibiotic after consulting with your veterinarian.

Vaccinating calves against viruses such as bovine viral diarrhea (BVD), infectious bovine rhinotracheitis (IBR), bovine respiratory syncytial virus (BRSV), and bacteria such as *Mannheimia haemolytica* and *Pasteurella multocida* may help prevent outbreaks of calf pneumonia or reduce the severity of disease. However, we know a young calf's immune system is not able to respond as well to vaccinations as an older calf's. Even if a calf with a good immune response can be

overwhelmed by a large exposure to germs, a successful plan to prevent disease in young calves needs to involve more than only vaccinations.

Herds that have the best calf health have a short calving season, and few heifers and cows experiencing calving difficulty. In addition, young calves are kept away from mud and other calves as much as possible. Cows that calve in good body condition and

that are on a good plane of nutrition are more likely to have healthy calves.

The best disease-control strategy is to focus on having good overall health of

the cows and calves by meeting the herd's nutritional needs, providing a good environment, and ensuring the timely use of vaccinations in the cows and calves.

If calves are affected with pneumonia while suckling their dams on summer range, you should be prepared to recognize and treat cases as early as possible with appropriate antibiotics in order to minimize death losses. **AJ**

*Editor's note: Robert L. Larson is a professor of production medicine and executive director of Veterinary Medicine Continuing Education at Kansas State University.*

"Cows that calve in good body condition and that are on a good plane of nutrition are more likely to have healthy calves."