



# Vet Call

► by **Bob Larson**, Kansas State University

## Calf pneumonia

*Pneumonia in young calves is an important contributor to death loss before weaning. Many veterinarians and cattle producers think of postweaning respiratory disease (also known as bovine respiratory disease or BRD) when they think about lung disease or pneumonia in cattle, but calves can get pneumonia while they are still suckling their dams. Because the risk factors associated with preweaning respiratory disease differ from BRD in stocker and feedlot cattle (which is usually associated with commingling and transportation), our understanding of how to prevent and control BRD in postweaned calves is not sufficient to address pneumonia in suckling calves.*

### Know the signs to prevent loss

Several recent studies investigating calf pneumonia have reported that an average of 3% to 11% of calves are expected to suffer from the disease each year. In addition, nearly 1.5% of calves will die from pneumonia before they reach the age of weaning. That makes calf pneumonia the second-leading cause of preweaning death, following scours. The most likely age for calves to be diagnosed with pneumonia is between 70 and 150 days of age.

Herds that have more cases of calf scours, herds that bring in nursing calves from outside herds to graft onto cows that lost their calves, and herds that creep-feed calves or synchronize cows appear to be more likely to have cases 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 indicated in a survey that weather, calving in confinement, failing to adequately vaccinate the herd, and nutritional deficiencies were also suspected to contribute to the risk of calf pneumonia.

Many times, the first sign that 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, lying down and being reluctant to rise, and having a high temperature, 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 that a young calf's immune system is not able to respond as well to vaccinations as an older calf's. Even 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 must involve more than just vaccinations.

Herds that have the best calf health have a short calving season and fewer heifers and cows experiencing calving difficulty. In addition, they keep young calves 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 timely use of vaccinations in the cows and calves. If calves are afflicted 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.

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**Editor's Note:** Bob Larson is professor of production medicine at Kansas State University.