

Dr. Dennis G. Bardelmeier, DVM
Ph.715-316-2369

**P.O. Box 366
413 South 4th Street
Abbotsford, WI 54405**



**Ph. 715-223-4700
Fax. 715-223-4711
info@northernlakesvet.com**

PNEUMONIA IN CALVES AND POST-WEANED HEIFERS TREATMENT PROTOCOLS

Pneumonia is a problem on many farms in barns where ventilation is a problem or when calves are taken from hutches and moved into group housing. Where ventilation is a problem, the bacteria and viruses that cause pneumonia seem to accumulate. When air is exhausted from the cows or older animals over the calves, the calves get bombarded with even greater numbers of the organisms. When calves are moved out of hutches (an environment expected to have clean air), they suffer the stress of weaning, the stress of moving and adjusting to a group, and they are breathing in whatever the other calves are exhaling.

The calf's best protection against pneumonia is the colostrum that was received after birth. The calf should be fed 4 quarts of good quality colostrum within the first 4 hours of life, preferably from a nipple bottle but by an esophageal feeding tube if necessary. Part of colostrum being of good quality is determined by whether the cow was vaccinated against the diseases to which the calf will likely be exposed.

IBR, BVD, PI3, AND BRSV are the most common viruses in herds today. The vaccinations used on cows are effective and can give protection to the newborn if good colostrum management takes place. Unfortunately, good colostrum protection may also interfere with vaccination of calves if practiced very early in life. Many farms have found using an intranasal IBR/PI3 vaccine (TSV2) at birth to be helpful.

PASTEURELLOSIS is the main cause of pneumonia in calves and young stock. The bacteria are normal inhabitants of the throat and upper airway where they do no harm. Any irritation to the respiratory system such as viruses, other bacteria, or foul air with too much ammonia can be irritants. Wet bedding not only chills the calf but also serves as a source of bacteria and ammonia. The best test for how wet is too wet is to sit on it and smell it at 8 inches from the surface. If pants come up damp or there is an odor at resting calf height, the bedding is too wet. Straw, especially, in winter, provides the best insulation. Care must be taken with shavings because dust can be a significant respiratory irritant. Pasteurella vaccines (One Shot, Once PMH, Prepsone) can be administered starting at about 2 weeks of age.

MYCOPLASMA pneumonia is a sometimes difficult condition to treat and tends to stay in the environment for long times. There are, at present, no effective commercially available vaccines. If mycoplasma is present, calves with ear infections and head tilt will also likely be observed on occasion.

To confirm the cause of pneumonia, post-mortem examination and laboratory testing is necessary. Culture and antibiotic sensitivity testing can guide treatment plans. Many times these test results are not available and, obviously, not having a dead calf to post is best. Consequently, treatment decisions are often based on past successes and failures, cost of drugs, and, especially in bull calves, withholding times.

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A good first choice is Resflor, which is a combination of Nuflor and Banamine (Flunixin) so it also has anti-inflammatory, fever reducing properties. It treats pasteurella and mycoplasma and is moderately priced.

The antibiotics with the shortest withholding times, for treating animals to be shipped are Naxcel, Excenel, and Certiflex. These are moderately priced. Another drug in the same family, Excede, has a longer withholding time but has an extended duration of therapy so the calf does not have to be treated daily.

Baytril, Draxxin, and Micotil are highly effective drugs but are among the most expensive.
ACCIDENTAL INJECTION OF MICOTIL INTO HUMANS CAN CAUSE DEATH.

LA200, Tetradure, sulfadimethoxine, and Polyflex are used successfully but have been around for a long time and are more likely to be met with bacterial resistance.

Banamine to reduce fever and inflammation is a valuable addition to drugs other than Reflor.

Please refer to product labels for dosing guidelines. **ALL OF THESE DRUGS HAVE A SLAUGHTER WITHDRAWAL TIME AND SOME ARE NOT ALLOWED AT ALL IN DAIRY HEIFERS OVER 20 MONTHS OLD.**