

# CALVING EASE

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Sam Leadley, Attica Veterinary Associates

## The Pneumonia Calf

Pneumonia is always bad news for calves. And, it results in extra work for the calf care person. Short-term consequences are reduced dry matter intake, delayed weaning and higher risk of an additional pneumonia event at weaning. Long-term losses from severe cases of pneumonia include delayed breeding, higher age at first calving and compromised milk production.

### Preventing

Yes, as always an ounce of prevention is worth a pound of cure. For calves housed in barns the highest risk factor is ventilation. Inadequate air exchange fosters high pathogen exposure. When the dose exceeds the ability of the calf's immune system to fight it off we get clinical pneumonia among the barn residents. Higher relative humidity inside the barn than outside is an indicator of poor air exchange. Using an inexpensive instrument to measure relative humidity, we can estimate relative humidity both inside and outside the barn. If it is higher inside than out we need to take steps to increase air exchange – fans are less expensive than antibiotics and sick calves.

During the winter months another high risk factor is inadequate energy in the ration. The two-quarts twice a day ration that was adequate last summer no longer provides enough energy even to maintain a calf in a twenty degree environment. For an estimate of the expected gains from a milk or milk replacer ration (young calves not yet eating calf starter grain) go to [www.atticacows.com](http://www.atticacows.com), click on Calf Facts and then on Est. GainPreweaned Calves. Scroll to your milk replacer (milk estimates are at the bottom of the list) and select your feeding program.

For example, choose the fourth line (90 pound calf fed 20-20 milk replacer mixed with 10 ounces of powder making 2 quarts of mix). If you scroll to the bottom of the page you find that if you feed only four quarts per day in a 20-degree environment the calf probably will lose weight!

In winter if the calf loses or only maintains her weight, that's evidence that she is getting an inadequate supply of energy. This puts the calf at high risk for bacterial infections – like pneumonia.

### Treating

- Timeliness of treatment  
Earlier is always better. Remember that the healthy calf is always ready to eat at mealtime. Any calf that does not hit the bottle or bucket when it is time to eat probably is coming down with

something or is already sick. Or, watch for a calf that normally cleans up her milk but this feeding has not finished hers. Watch for the calf that usually drinks well but this feeding is a slow drinker – normal behavior is vigorous drinking. Not all cases of unusual eating behavior are pneumonia but many warrant a second, more careful look. Runny nose? Shallow breathing? More rapid breathing than usual (normal respiration rate is around 60/minute)? Coughing?

Not everyone takes temperatures. On one hand, a fever or temperature above 103.5 is a common symptom of respiratory illness. On the other hand, if you pick up the abnormal eating behavior and other pneumonia symptoms early enough the calf's temperature may not yet be that high.

- Follow the veterinarian's prescribed treatment protocol  
This assumes you and your veterinarian have discussed a pneumonia treatment protocol this winter season. Have this discussion regularly – new drugs are always coming on the market, procedures change – keep up-to-date.

Drug-Dose-Duration. That is what you must know. Be sure your veterinarian specifies all three of these facts. He/she and you know the treatment history for your farm.

Once the drug is selected, be sure you use the correct dose. The dose is usually weight dependent. A recent survey of producers revealed that nearly three-quarters of the weight estimates made when deciding the dose of an antibiotic were incorrect. I recommend keeping a calf weight tape handy rather than guessing. There is one available just for calves – not the one that is six feet long for breeding age heifers. The most cost effective dose is the correct one; neither too much nor too little.

Duration of treatment depends on the drug and the dose. If you are using a sustained release drug the duration question may be already settled – the release is over the recommended treatment period with one injection. Other antibiotics may require twice daily, once daily or every other day administration. The two most common reasons that a calf has a relapse three to seven days after supposedly recovering from pneumonia is that the treatment was stopped too soon or some of the injections were missed.

If you really want to be radical, work on reducing drug costs and increasing treatment success rates by tracking recovery rates for treated animals. This is called “evidence-based treatment.” (See [www.atticacows.com](http://www.atticacows.com), Calf Facts, Evidence Based Calf Care.) Record treatments and whether or not they were successful. Then both the caretaker and veterinarian can work toward the most cost effective treatment protocol. If the facts about treatment successes and failures are available, better choices may be made, more calves recover sooner, and costs for treatments go down, too.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to Calving Ease, 11047 River Road, Pavilion, NY 14525 or to **CALL** 585-591-2660 (Attica Vet Assoc. office) or **FAX** (585-591-2898) or **e-mail** [sleadley@frontiernet.net](mailto:sleadley@frontiernet.net). Back issues may be accessed on the Internet at either [www.atticacows.com](http://www.atticacows.com) or [www.calfnotes.com](http://www.calfnotes.com) and clicking on the link, Calving Ease.

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