

# Calving Ease

February 2008

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## Measure it or Lose Control

Do you think that the title of this issue is probably an overstatement? I am going to argue that when you do not have the facts about your calf enterprise you are “muddling through” rather than managing.

### **For example, a surge in treatable scours cases.**

The most frequent response I see to this situation is to mount a search for a “new bug.” “Since we have not changed anything this surge must be due to the introduction of some new pathogen.” As an aside, when we say, “We have not changed anything,” are we claiming that our enterprise does not have protocol drift, ever?

Back to the main point, how much do we really know about our calf enterprise? How many calves are getting their first feeding of colostrum within the first few hours of life (percent)? Is this written down anywhere? If we keep this record, how recently have we summarized these facts so that they are usable information? Remember, we lose about forty percent of the calf’s ability to absorb antibodies when the first feeding comes later than six hours after birth.

How much colostrum are the calves actually consuming? For example, the farm protocol may say that every calf receives four quarts of colostrum in the first six hours. How closely is this procedure being followed? In practice, are the calves born at night assumed to have nursed? And, then these calves are not fed any colostrum until the next regular calf feeding time? Remember, calves cannot absorb antibodies that have not been fed.

Are we assuming that all colostrum that “looks good” has an adequate concentration of antibodies for successful passive transfer of immunity? Even in a well-vaccinated herd it has been estimated that as many as one-fourth of the cows give poor quality colostrum. While the low quality colostrum is great nutritionally, it does need to be supplemented if that is all available to be fed. Remember, for a given volume fed, antibody transfer works better with high rather than low quality colostrum.

Does our calf enterprise track colostrum cleanliness? This is a key piece of information for quality control in calf care. Recent experiences in a number of states emphasize for me the universal challenge of feeding clean colostrum. Even samples from well-managed dairy farms will be contaminated with enough coliform bacteria to predict treatable cases of scours. As an aside, this is a challenge when feeding colostrum replacer, too.

If your farm has not submitted colostrum samples for bacterial culturing within the past six months, now is the time to do it. Using a sterile milk sample bottle (just like the ones used by the milk truck driver), from the end of a tube feeder or nipple bottle just as you are ready to feed colostrum to a newborn calf

collect one-half a sample vial of colostrum. Freeze it. Have it cultured asking for both speciation and quantification.

Remember, contaminated colostrum hits calves twice. First, they may transfer some the bacteria directly into their blood. Second, many bad bacteria will attach to the lining of the gut ready to make trouble for weeks.

**For example, “too many” calves treated for pneumonia.**

Do we have a procedure that everyone uses when diagnosing pneumonia? If you have not given this much thought, consider Dr. McGuirk’s (University of Wisconsin) diagnostic scoring system with pictures. It is located at this web site:

[http://www.vetmed.wisc.edu/dms/fapm/fapmtools/8calf/calf\\_respiratory\\_scoring\\_chart.pdf](http://www.vetmed.wisc.edu/dms/fapm/fapmtools/8calf/calf_respiratory_scoring_chart.pdf) . Early diagnosis of pneumonia and timely treatment are keys to full recovery.

How complete are our records? We need to write down details for each calf diagnosed with pneumonia [for example, ID, severity of symptoms, treatment given]. These facts along with the age of the calf when she was treated need to be summarized regularly to give us useful information. Examples are:

- Percent calves treated one or more times between birth and weaning.
- Percent calves being retreated for pneumonia.
- For an individual antibiotic, percent calves successfully recovering from pneumonia.

I like to summarize treatments by age, too. In the winter many cases around two weeks of age may point to inadequate energy from milk or milk replacer for environmental conditions. Too little energy for too long results in low resistance to pneumonia. Many cases around four weeks old may point to inadequate coccidia control. Subclinical coccidiosis leads to low resistance to pneumonia. Many pneumonia treatments right around weaning suggests inappropriate weaning management.

**Bottom line?**

Collecting and recording good reliable facts and summarizing them to make useful information leads to good management. We manage what we measure.

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** [calvingease@rochester.rr.com](mailto:calvingease@rochester.rr.com). A limited number of 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.

Our thanks to AlphaPharma for sponsoring this issue of Calving Ease.

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