Calving Ease

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Out of Balance = Sick Calf

- **Too many challenges and too little immunity**
- **The futile search for "THE" cause of sickness (scours, pneumonia).**
- **A team approach is most likely to succeed.**

We are bombarded with messages about the importance of doing a good job of colostrum management. Feed plenty of high quality colostrum as soon as practical after birth. Those are the well-accepted "3 Q's" (Quantity, Quality, Quickly) for doing a good job of establishing passive immunity in the newborn calf. Why, then, in the face of what should be "good-enough" passive immunity, do young calves get sick?

While answering a question about calving pen management a speaker at a dairy meeting observed, "Sh** always wins." He was simply stating the fact that sufficient exposure to adult cow manure, especially before the newborn's first feeding of colostrum, will virtually insure all the exposed calves will get sick. When the "challenge" side of the balance on the right above outweighs the "defense" side on the left above, we have a sick calf.

The futile search for "THE" cause of sickness (scours, pneumonia).

One approach to solving this "imbalance" between pathogen challenge and immunity is to search for "THE" cause of the imbalance or sickness. This is a very seductive mind set. It falsely promises to simplify a very complex biological world.

For example, we are treating an excessively large number of pneumonia cases among 11-week old calves in our transition pens. It is easy to be seduced into thinking that the most recent diagnosis (coccidiosis) is still appropriate. Treat for that, and we can forget about it.

Nevertheless, why does this pneumonia issue keep repeating among this age group in this barn? Are there other multiple underlying causes? Is the problem more intense when the barn is closed up for cold weather (an air quality issue)? Is the problem more intense when we begin feeding free-choice hay as soon as the calves arrive at this barn rather that limit-feeding hay for the first 10 to 14 days (a rumen development issue)? Is the problem more intense when a high proportion of calves coming into the barn have a history of pneumonia in the pre-weaning phase (lung tissue damage issue)?

The Team Approach Can Help Identify "Real-World" Causes and Solutions

Who are the folks that could make up the "calf management" team? On-farm, this may include the primary calf care person, "fill-in" or relief-calf-care persons, the herdsperson(s) and/or owner(s). If your nutritionist is skilled in calf growth and development, she/he should be included. Especially important in this case is to include the herd veterinarian.

If the rates of calf sickness or death are higher than desired, probably the primary calf care person needs to take the initiative to push for a "team" approach for solving these problems.

The first and most important goal for a first team meeting is support and encouragement. "We can do a great job rearing calves!" Always start on a positive note. We want to work together to improve calf care.
Then, it is time to review what is currently happening – Successes in weaning gains as well as weaknesses in sickness and treatment rates as well as death

These are the steps in "team building." This is where you build commitment to working as a team.

Then, it is time to go on to these steps:

- Identify the most likely causes of morbidity and mortality. Draw on the varied experiences of the team – every person has the opportunity to see the calf/heifer enterprise from a different perspective. Avoid being caught in the "The Cause" trap.

- Identify the multiple ways in which immunity may be compromised.

- Select one or more courses of action designed to enhance immunity. The resource "Increasing Resistance to Pathogens" is available HERE or you may use this URL http://atticacows.com/library/newsletters/HealthyCalvesIncrResPathR1955.pdf.

- Identify the multiple sources of pathogens involved.

- Select one or more courses of action designed to reduce pathogen exposure below critical levels. The resource "Reducing Exposure to Pathogens" is available HERE or use this URL http://atticacows.com/library/newsletters/HealthyCalvesReducingExpPathR1962.pdf.

Another systematic approach to morbidity problems was suggested by Dr. Sheila McGuirk (School of Veterinary Sciences, University of Wisconsin) in her presentation, "Managing Calf Diseases." An outline for this is available at this URL http://atticacows.com/library/newsletters/ManageCalfDiseasesHACCPR1954.pdf or click HERE.
Her analysis is divided into two parts: (1) Preventing excessive exposure to pathogens and (2) Inadequate resistance in the calf.

Thanks to Attica Veterinary Associates, P.C. for sponsoring this issue of the calf management newsletter.
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Have you visited the "Calves with Sam" blog for snips of calf news?