

Calving Ease

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Cold Weather = Poor Calf Care?

- **Damp and dirty bedding = poor calf care**
- **Too few calories = poor calf care**
- **Not enough antibodies = poor calf care**
- **High bacteria counts in colostrum = poor calf care**

In the northern hemisphere the warm days in September and October tend to lull us into a complacent state. We thing, “The calf-favorable weather of late summer surely will continue indefinitely.” Not true! Keep in mind four key practices that help avoid poor calf care as cold weather arrives.

Keeping bedding clean and dry.

As temperatures fall below 60 degrees (16C), newborn calves start to burn body stores to supply energy for maintenance. Reducing body heat losses lowers the drain on body stores of energy. How? Remember that the youngest calves lie down at much as ninety percent of the time. Thus, one way to cut body heat losses is to avoid direct contact with cold surfaces. Have the calf lie on bedding that minimizes heat transfer – that is dry enough and thick enough. My test of adequate cold weather bedding is to kneel on the bedding. On a chilly day as I kneel my knees should start to warm up. And, my knees should stay dry.

Further, as the fall season progresses, the importance of bedding into which the calf can “nest” increases. The “nesting” effect reduces airflow around the calf. This decreases convection heat losses. If sawdust or shavings are used not much nesting is possible. It may be profitable to consider calf blankets at least for calves less than one month of age. Click [HERE](#) for a resource on using calf blankets.

Feeding enough calories to support the farm’s growth goals.

We have to feed enough for both maintenance and growth. The farther environmental temperatures fall below 60 degrees [16C], the greater the amount of energy from feed that is diverted away from growth to maintenance. That is, maintaining her core body temperature of 102° (39C).

One way to do this is to increase the feeding rate for milk/milk replacer. For example, if the farm’s growth goal is 1.5 pounds per day for preweaned calves, then as temperatures drop from 60 [16C] to 40 [4C] the whole milk feeding rate for a 90 pound heifer calf should go up from five to six quarts daily. If 24-20 milk replacer is fed, then the feeding rate when mixed at ten ounces for two quarts goes up from six to seven quarts a day.

If your experience with feeding more milk has been an increase in scours treatments I suggest reviewing the ten-point list, “Feeding More Milk without Scours” available by clicking [HERE](#). Page two of this list of five key management skills needed for intensive milk feeding programs.

Doing a great job of delivering colostrum to newborn calves.

It is almost inevitable that fall weather will be accompanied by an increase in pathogen exposure for heifers. The youngest calves are the most vulnerable. This disease challenge can be offset by a stronger immunity level. For the youngest calves this “beefed up” immunity has to come from the dam’s colostrum.

The time-tested colostrum care rules apply:

- Quickly – feed as soon after birth as practical, preferably within two hours.
- Quality – feed the highest quality (antibody concentration) colostrum available.
- Quantity – feed 200g antibodies first feeding – for most farms this means 4 quarts for a Holstein calf.

It is possible to check on colostrum management performance with a simple blood test. Calves may be tested inexpensively during the first week of life. We aim for blood test results that show 90% of the calves have a value of 5.0 g/dL and 75% of the calves have a value of 5.5 g/dL. Click here [Test Guide](#) for a resource on testing for passive immunity.

A series of resources on colostrum management may be found at www.calfacts.com and scrolling to the word, colostrum.

Feeding Clean Colostrum

None of us intend to feed contaminated colostrum. However, it does happen. A US national survey of colostrum fed to dairy calves showed that 45 percent of the samples were contaminated at a level greater than 100,000 cfu/ml bacteria. That is a huge number of bacteria. If a calf is fed about 3,800ml (4 quarts) colostrum at her first feeding contaminated at this level that adds up to 380,000,000 bacteria. Many of the colostrum samples we culture in our Attica lab have three or four times higher counts than that. So, there is room for improvement.

Key best management practices for clean colostrum include:

- Good teat preparation – use the dip-wipe-dip-wipe-scrub technique.
- Clean collection equipment – consider a quick pre-use rinse with hot water and bleach.
- Clean feeding equipment – for a reliable simple washing procedure, click [HERE](#).
- Either feed or chill colostrum to 60° [16°C] within 30 minutes of collection.
- Periodically monitor bacteria levels by having “as-fed” samples cultured in a laboratory.

Calf Care Tip

Inexpensive household bleach does a good job in knocking down most bacteria on calf feeding equipment. The key points that determine how well bleach works as a disinfectant are: (1) Time – longer exposure = greater kill; (2) Concentration – higher concentrations = greater kill; and (3) Temperature - A 100-fold increase in killing efficacy has been observed between corresponding household bleach solutions at 68° and 104°.

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) with [Subscribe](#) as the subject. Back issues may be accessed on the Internet at either www.atticacows.com or www.calfnotes.com and clicking on the link, Calving Ease.

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Remember to search for “Calves with Sam” blog for profit tips for calf rearing.