

CALVING EASE

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Treatment and Prevention for Scours

One of the most difficult skills to learn as a calf raiser is diagnosing scours or calf diarrhea. The most important reason for difficulty is that nearly all calf diarrhea cases have more than one cause.

These multiple and overlapping causes include many pathogens and health conditions. Viruses, bacteria and parasites all have scours-causing potential. Some of them damage the gut lining. This reduces the gut's liquid absorbing capability.

Others create toxic conditions. In order to dilute these toxins, fluids move from the body's plasma pool into the gut. Both conditions create abnormally fluid feces. Thus, diarrhea or scours.

Unfortunately, very similar diarrhea symptoms are caused by different combinations of pathogens and health conditions. Given this mess of causes and symptoms, how can we best treat and prevent scours?

Deal with the Crisis First

Prevent dehydration.

That means spotting mildly dehydrated calves right away. Signs? Calf is slow to get up at feeding time. Calf is not vocal at feeding time. Calf's movements are slow rather than "bouncy." Calf's eyes don't look "just right." This is not too hard to spot – just look at the bright eyes on a few normal calves and compare that with duller, more sunken eyes of a scours calf. Of course, the most likely candidates are ones with dirty pens and rear ends.

If we can keep a calf fully hydrated, our chances for a spontaneous recovery from scours without any other intervention are very good. Mildly scouring calves may require nothing more than free-choice water in addition to regular milk/milk replacer feedings.

Moderately scouring calves (losing more than two quarts of fecal fluids daily) may require oral electrolytes. We monitor fluid intake quite carefully for these calves. These extra fluids (in addition to milk/milk replacer) along with the additional attention are essential. This intervention helps maintain the body balance of both fluids and minerals.

Severely scouring calves may lose as much as eight quarts of fecal fluids daily. They often require more than oral rehydration for replacing the more than two gallons of fluid losses.

Diagnose and treat secondary infections immediately.

The most common secondary infection associated with diarrhea or scours is respiratory illness. Signs? Often the first symptom is unusual drinking behavior. That is, a calf that normally eats aggressively now eats more slowly or fails to clean up her milk/milk replacer. The abnormal behavior may be accompanied by difficulty breathing through her nose. One must watch carefully to see this breathing problem.

Watch for nasal discharge (both clear and white snot). Also, in the very early stages of respiratory infections like these, many calves will not yet have a fever. If you miss these symptoms and fail to follow your treatment protocol for respiratory infections immediately, by the next feeding these calves usually will have temperatures above 103.5 degrees. If you do not have a treatment protocol, ask your veterinarian to help you set up one.

An Ounce of Prevention is worth ...

When launching an offense against scours, it is important to remember there must be two parts. On one hand, if we want to reduce scours rates, then we must reduce the frequency and intensity of calves' exposure to pathogens, especially newborn calves. That means: (1) reducing the exposure time with the dam, (2) cleaner calving conditions, (3) feeding cleaner, more wholesome colostrum, (4) cleaner, dry, draft-free housing, and (5) feeding cleaner, more wholesome milk/milk replacer daily.

On the other hand, if we want to reduce scours rates, then we must increase the immunity level of calves, especially newborn calves. That means strengthening our colostrum management program. This improvement starts with getting fresh cows milked before their milk production can dilute the colostrum antibodies. Separating high and low antibody concentration colostrum is another potential improvement. Feeding an adequate amount of high antibody colostrum as soon as possible after birth is another place to improve. Four quarts of colostrum fed in the first six hours is a minimum standard for a progressive dairy. The effectiveness of all these steps can be assessed by routinely measuring blood serum total proteins on one to seven day old calves.

Go to <http://www.calfnotes.com> for additional resources on this subject. In the left hand menu, under Archives, click on "Colostrum Feeding" or "Health Management." CalfNotes #'s 21, 42 and 43 are about scours. Or, go to <http://atticacows.com> and click on Calving Ease, Back Issues. Select January '03, March/April '02, October '02 and July '01.

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