Late Winter - Spring Scours in Calves

- Wide variation among dairies during late winter – spring season for scours treatment rates among preweaned calves.
- How can management affect scours treatment rates?
- What is the right scours treatment rate among preweaned calves for my dairy?

Scours treatment rates during late winter and spring seasons

One of the measures of scours treatment rates that is easy to observe here at our vet clinic is our sales of a liquid solution (bismuth subsalicylate, alias “the pink stuff”) used by dairies for calves diagnosed with diarrhea. On one hand, we sold 390 gallons of “the pink stuff” the first 3 month of 2018 – that is a lot! On the other hand, most of the sales were to a limited percentage of our clients. When making farm calls the last three month our professional staff has observed some farms with 70% plus diarrhea rates and others with a small percentage being treated.

How can management affect scours treatment rates?

We know biologically that something has to go wrong for a calf to scour. Or, to put it another way, calves living primarily on either milk or milk replacer should have a normal stool. That is, we expect a yellowish color and firm enough to remain on top of the bedding.

Symptoms of diarrhea are changes in color (e.g., grey, whitish) and consistency (loose, watery). So, what are a few of key management procedures that promote minimizing scours? First, we can jump on the immunity wagon. Provide plenty of high quality clean colostrum fed ASAP after birth.

Second, we can work to suppress pathogen exposure starting in the calving pen. Clean calving environments combined with short times in the calving pen are a good first step. And, of course, low-bacteria counts in colostrum are essential.

Winter warming pens as well as permanent housing need our attention, too. Facilities for newborn calves that start out nice and clean in December are often neglected. They can turn in to bacterial incubators by late winter.
Third, cold weather nutrition can be marginal. When calves have to use a high percentage of the nutrients in their milk ration to maintain their core body temperature the energy and protein available for building immune resources can fall to very low levels. In other words, underfed calves have a low resistance to bacteria and viruses. This is a perfect set up for diarrhea, especially at 10 days to 2 weeks of age. Remember to continue with winter feeding rates until night-time temperatures are consistently above 50 degrees.

Fourth, even if we are feeding adequate amounts of milk or milk replacer to our young calves we need to pay attention to providing consistent care. There are a number of measures of consistency (see Consistency: Calf Care Checklist – click HERE or go to http://atticacows.com/library/newsletters/ConsistencCalfCareChecklistR1867.pdf). Of special significance are consistent solids levels, feeding temperatures and feeding volume. The biology involved here is related to how quickly the abomasum (4th stomach compartment) empties and how consistent care promotes rapid emptying and, thus, less opportunity for undesirable bacteria growth.

What is the right scours treatment rate among preweaned calves for my dairy?

To a great extent the scours treatment rate is the result of multiple factors of which the two largest ones are pathogen exposure rate and immunity level. We must choose how to balance sick and/or dead calves against spending time and money to suppress scours treatment rates.

The national Dairy Calf and Heifer Association’s Gold Standards suggest the goal of less than 15 percent preweaned calves treated for scours. For example, I used zipties to mark calf hutches where calves were treated for scours (that is, received electrolytes). When ties were cut off I tossed them into a bucket and counted them once a month. Some folks mark the calf numbers on a calendar. If you keep records it is a good idea to compare scours rates on your dairy by month or over four seasons of the year. With year-to-year records you can document progress in lowering treatment rates at least by season.

For management purposes I found the most helpful treatment rate information was comparing year-to-year by season. I had a lot of untreated diarrhea due to cryptosporidiosis – calves would be just loose for a couple of days and then back to normal with no electrolytes. During the spring field work season calving pen and colostrum feeding management suffered – thus, my scours treatment rate went up close to 20%. In contrast, with my intensive feeding program and good newborn care during winter months my scours treatment rate (electrolytes, antibiotics) usually dropped to close to 5%.

You may want to look at these basic scours resources at www.calfnotes.com:
No. 21 Feeding scouring calves
No. 42 What are scours?
No. 43 Electrolytes for scouring calves
On electrolytes try this site: https://www.dairyherd.com/search?keyword=electrolytes for several informative articles on electrolyte selection and use.

Thanks to Merck Animal Health for supporting this issue.
More information on their products is HERE or at this URL https://www.dairycare365.com/products