Scours: What's "Normal?" and Setting Treatment Goals

When greeting a calfcare person on a farm I always ask, "How are the calves doing?" I hear about the ones that are doing well and ones that are doing poorly. That's life.

I get suspicious, however, when I hear about quite a few scouring calves and the person adds, "But, that's normal."

What is the person telling me about the situation today? That 50 percent of the calves with scours is the usual state of health? Or, is the person telling me that this situation is "just the way life is expected to be. It can't be changed." Or, both?

What's Normal?

Biologically, something has to go wrong for a calf to have scours or diarrhea. Calves living primarily on either milk or milk replacer should have a normal stool. We expect it to be yellowish in color and relatively firm. Symptoms of diarrhea are changes in color and consistency from that standard.

But, in an imperfect world lots of things can go wrong. Calves are exposed to an excessive number of pathogens. Calves receive too few defenses from their dams' colostrum against pathogens. They have scours.

What's "normal?" The answer is not found in biology. We set the standard for "normal" ourselves. It is possible on a commercial dairy farm to have a treatable scours rate less than 1 percent. In contrast, a few farms have treatable scours in nearly all their calves. Which situation is "normal?"

Scours: Inevitable or preventable?

To what extent do we believe that calf health can be managed? Are we convinced that the rate of treatable scours is a result of how we care for calves? Or, are calf scours inevitable and they just can't be prevented?

Nearly all cases of scours or diarrhea are caused by an infection. Excessive numbers of pathogens have found their way into the calf's body. She does not have enough immune defenses to fight them off. The resulting infection disrupts the normal functioning of the digestive system. One part of abnormal functioning is scours (diarrhea).

The question above could be, "Are intestinal infections inevitable or can they be prevented?" Not believing they are inevitable I prefer to ask, "What rate of intestinal infections can I endure among my calves?"

Remember that the two factors involved, pathogen exposure and immune system strength, are subject to a large extent to human control. We chose how well we will manage them.

On one hand, if we spend too little time and money to decrease exposure to "bugs" the chances of calf scours go up. If we spend too little time and money through colostrum management to increase the strength of immune system the chances of scours go up.

On the other hand, it's possible to set one's goals too high. Spending an unreasonable amount of time and money to reduce pathogen exposure and increase immune system strength won't eliminate every single case of calf scours.

What's the right goal for my farm?

The circumstances are different for every farm. Cash and labor are often in high demand and not enough of them to go around is a common situation. However, there are very few dairies where dead and sick calves are profitable. Fewer cases of scours are always more desirable.

How to set a goal or standard? One way is to compare the scours treatment rate on your farm at 2 points in time. What rate do I have now? What rate do I have 2 months from now? This means that some written record has to be made of calves being treated for scours.

One practical way to do this is to limit your recorded case to those calve receiving medication for scours (this is not the same as giving only oral electrolytes). A small spiral notebook will work well for this. At the end of each month the cases that were medicated can be added up and divided by the number of preweaned calves.

Just one caution in doing this comparison. There is a lot of seasonal variation in scours rates. If you make quarterly or longer comparisons be certain to compare treatment rates in the same season of each year.

Another way to set a goal is to compare your calf enterprise with others in the dairy industry. The national group, Dairy Calf and Heifer Association, set their standard for calves up to 8 weeks of age being treated for scours as 15 percent (DCHA, 2016).

Finally, knowing that scours is the cause of death for one-half of all the preweaned calves that die in the U.S, pick a number less than 15 percent. Ten percent. Five percent. Go for it!

For Your Information

At Jim Quigley's web site, <u>www.calfnotes.com</u>, there are three Calf Notes of special interest on scours:

- No. 21 Feeding Scouring Calves
- No. 42 What are Scours?
- No. 43 Electrolytes for Scouring Calves
- No. 203 Preweaning morbidity and mortality in the U.S.
- No. 205 Prevalence of Cryptosporidium and Giardia in the U.S. why your calves may have scours that do no respond to antibiotics

No. 206 Adding electrolytes to milk or milk replacer – why this practice may cause or make scours worse.

At <u>www.calffacts.com</u> scroll to "Milk Feeding in an Intensive Growth Program" – scroll down to page 4 "Manure (poop) Patrol" for a discussion of "normal" feces from calves consuming 8 or more quarts of milk per day.