

CALVING EASE

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Persistent Breaks with Coccidiosis

- Not all diarrhea problems among heifers are due to coccidiosis. Fecal testing will confirm the level of oocyst shedding. Shedding rate correlates well with severity of disease.
- Control beyond feeding one of the 5 drugs labeled for coccidiosis means reducing the number and survival of “eggs” (sporulated oocysts).
- Dr. Sheila McGuirk suggests 7 common sense measures to reduce shedding and survival of “eggs.”
- Resistance to coccidia infections may also be compromised by other factors, says Dr. McGuirk, including ration changes, pen changes, limited access to clean water, overcrowded pens, stressful handling, late dehorning, frequent vaccinations and inconsistencies in feeding and management.
- Be aware that the residual effects of calfhood illness, especially pneumonia, may contribute to higher coccidia infection rates.

Defining the Problem

Dr. McGuirk suggests that when more than twenty percent of the calves in a pen are estimated to have diarrhea, then fecal testing needs to be done. This will help rule out other problems such as salmonella, nutritional issues, and other parasites such as giardia and cryptosporidia.

Fecal testing can be done on individual animals. We feel confident that the pen has coccidiosis when the threshold of greater than 30 percent of the heifers showing moderate shedding (greater than 1,000 opg) [OPG=oocysts per gram] Or, up to 5 animals can be pooled using 10g of feces per animal. Then we use the threshold of greater than 500 opg to diagnose an infected pen.

Reducing shedding and survival (Dr. McGuirk’s action list)

- Provide clean, well-bedded resting space. We are talking about at least 34 square feet per transition heifer. Think this way – the more space per heifer the lower the concentration of oocysts. Remember fresh bedding will decrease oocyst contact as well. Dr. McGuirk in her presentation at the 2013 Dairy Calf and Heifer

Association meetings suggested 35 to 50 pounds of straw bedding per heifer twice a week would be a workable standard.

- Optimize ventilation in the barn and calf and heifer pens. Stale air and humid conditions increase environmental exposure to coccidia oocysts. In many regions the normal humidity is not low enough to keep barn humidity low enough to keep bedding dry.
It is common in many regions to need both natural ventilation for barns as well as some kind of mechanical means of pushing supplemental air into the heifers' living environment during cold weather.
- Provide enough space for all the heifers to eat at one time. This is especially important for coccidiosis control programs that depend on control drugs mixed into or top dressed on feed. We have to remember that more space per heifer is needed as they grow. The 15 inches that was okay when they were 4 months old is not enough as they approach prebreeding age.
- Minimize weight and age variation among animals in the group. On an age basis try not to have more than 4 months between the youngest and oldest. On a weight basis try not to have more than 200 pounds difference between the lightest and heaviest.
- Avoid feeding on the ground unless it is at a bunk. No matter where you feed minimize fecal contamination of the feed. Remove refusals. Keep animals out of the feed. Don't walk in the feed with contaminated boots. And, remember to keep equipment that is contaminated with manure out of feeding areas.
- Provide plenty of clean water. Dr. McGuirk recommends a minimum of 12" of linear water space per 10 animals. And, keep these waterers clean.
- Observe the heifers. Watch them closely enough to identify sick ones. Promptly treat these infected animals. This will minimize oocyst shedding from them.
- If your pens are all-in:all-out, maximize the time between successive groups.

Remember, it is possible to manage to minimize losses due to coccidia. We are smarter than the average oocyst!

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