

What factors play a role in keeping your neonatal calves healthy?

By Marty Morgan, Cooke County Ag Agent

Well first let me say it's a combination of good cattle management practices that we should all implement into our cow-herd. Having said that, at the top of my list is nutrition. You always hear folks say "cows need to be in good shape to breed". Well what shape should they be in to calve? Or to raise that calf to weaning? Often times we hear "I better not feed the cows too much or they will have trouble calving" you know, the fatter she gets the bigger the calf will be, and to some extent that can be true. But, genetics play a bigger role in calf size so watch those EPD's when breeding your herd. On the other hand if you shortchange the cow nutritionally during any of the 283 days of gestation that could negatively impact the developing fetus and make it more susceptible to disease after birth. Calf health begins at conception, where dam nutrition is of utmost importance. Once the calf is born, dam nutrition is vitally important and her requirements must be met on a daily basis to keep her and her calf healthy and free of sickness. Anything short of that and you're asking for trouble.

Well next on my list are vaccinations, you know, annually vaccinating the momma cow too, not just the calf only. AND Colostrum! How important is it to the health of the calf at birth and early lactation? They make a lot of good vaccines that can protect our cows against everything from respiratory diseases, Bovine Viral Diarrhea, reproductive diseases like Vibriosis and Leptospirosis, clostridia's like blackleg, and others. These vaccinations of course build up the cow's immune system and protects her from these pathogens. Well if she is in top notch shape as far as her health goes, then she will have a better chance of utilizing a good nutritional program. Also another important aspect of vaccinating her is that she passes those antibodies on to her calf in the form of colostrum/milk. The Immune response of neonatal calf is functional, but naïve and immature, meaning no passive antibody transfer, and Colostrum is a solution to this problem. Adequate colostrum intake is CRITICAL to calf health. I am not a Vet so I will just leave it right there. I strongly recommended you consult your local vet before carrying out a vaccination program. And make sure that calf gets a good healthy dose of Colostrum when born.

The next critical time for the calf is at birth. A female in excellent body condition score (6.5 to 7 for heifers and 5.5 to 6 for cows) should deliver a calf quickly and without assistance. In a perfect world calves from heifers should be born within 60 minutes of the appearance of the water sac, and the calf should be standing 30 minutes later and nursing 30 minutes after standing. We all know that is sometimes not the case. An adult cow should deliver her calf more quickly than a heifer (30 minutes) with the calf standing and nursing in the same time frame as in heifers. If this is not the case, dystocia or low calf vigor may be the issue. If it's dystocia in heifers, use a calving ease sire (high CED EPD) from a calving ease breed on your heifers. If vigor is a problem, genetics are likely the reason. Crossbreeding with a different breed or composite will add heterosis and should solve the problem. Why is vigor important? Colostrum consumption is greater in calves that are born with more vigor. Improved intake of colostrum equals healthier calves.

Another critical factor in neonatal calf health is the calving environment. Some folks use the Sandhills Calving System (SCS) so that calves are born into a "clean" environment. In SCS, pairs stay where the calf

was born, and cows yet to calve are moved to a new “clean” pasture. “Clean” means no cattle were there for the previous few months. This system is opposite of the traditional “calve all cows in a calving lot and move pairs to a ‘clean’ lot or pasture.” They say this older method is a great recipe for contaminating the area with disease organisms and almost ensuring all calves born in the second half of the calving season will get sick. Start with the herd in the calving pasture, and those that calve there stay there. Those yet to calve go to the new clean pasture so those calves are born in a clean environment. Ok if your calving out heifers I agree that a clean environment is ideal but and it works ok with small groups, but have you ever tried to separate a larger group of heifers with half of them having baby calves on them? It’s near impossible. It’s a lot easier doing it the old way, which is moving the new pair to another pasture, especially if you’re calving out these larger groups. I always tagged my calves and moved them immediately to the pair pasture. When I was about half way calved out I would move all the bred cows to a new pasture to help reduce some of the contamination exposure. There are several ways you can calve out heifers if you have the right facilities, traps or pastures. The weather plays a role in the health of the calves too and some additional environmental keys are: Calve outside in weather that promotes calf health, Calve heifers separately from cows, and finally Cows and calves should not have access to a barn. Having a calf-only shelter is fine; having cows with free access to a barn equals wet, manure-covered cows and sick calves. And never bring in new animals during the calving season. I’ve seen disasters when this happens. Purchasing a calf to graft onto a cow that loses hers is a great way to “buy” a new disease, especially if coming from a sale barn. So wrapping up there are a lot of things you can do to keep your cows and calves healthy, and you have control over most of them.