



Colorado State University

Extension

The First 72 Hours Is Critical For Your Newborn Calf.

Michael Fisher, GPA Area Livestock Extension Agent

Many of you will be coming up on calving season just around the corner. That makes this a good time to be preparing your equipment and planning your strategy about the 2013 calving season. It is also a good time to reflect on what the calving process entails. Often we take calving for granite and we rely heavily upon the mothering ability of our cows. Still, we need to face the reality that not every cow in Eastern Colorado is a candidate for “Mother of the Year”. Therefore, it is a good exercise for the producer to reflect on what happens when a new calf arrives and be prepared in case some assistance is needed. Dr. John Hall wrote a timeline in 2001 that outlines this. Below I have used Dr. Hall’s timeline as a guide to create a modified version. Remember, the first 72 hours is critical for your newborn calf.

Labor through Calving (-4 to 0 Hours)

Labor has the potential to be a very exhausting and strenuous process for the cow. This can be especially true for first calf heifers. Even when there is not a dystocia problem (calving difficulty due to calf presentation or size) it is possible that a cow or heifer may become too exhausted and give up on the calving process. Additionally, a dystocia issue can restrict or even eliminate a cow or heifer’s ability to deliver a calf. Research surveys conducted out of Montana suggest that the vast majority of calf stillbirths and nearly 50% of calf mortalities that are born alive and then die in the first 24 hours can be contributed to dystocia issues. A producer needs to check his/her herd three or four times a day to monitor for such concerns during the calving season.

If you feel that a cow or heifer is having difficulty you should intervene early. A calf pulled a little early is not a problem, if the cow has fully dilated. Research that has compared early calving assistance compared to extended calving difficulty has shown that those calves that were helped early tend to be healthier. Additionally, the cows and heifers receiving the early assistance in these studies were able to breed back at a sooner date.

Birth to Standing (0 to 4 Hours)

We expect that calves will be up and will have nursed in the first two hours after birth. Severe weather, injury, illness, or exhaustion can interfere with this. The colostrum milk, which provides the calf with an initial dose of antibodies, is vital in the first four hours after birth. The producer should check to see if newborn calves have nursed in those first four hours. We often expect that calves that had a difficult

birth, were born in bad weather, or are sick will take longer to stand and subsequently are less likely to get maximum antibody exposure. You should consider assisting these calves with getting their colostrum.

Occasionally, we may have to tube feed a weak calf. In these cases, there are multiple places where we can get colostrum to give to the calf. When deciding where to access colostrum consider that research indicates that there is a selection priority based on quality of the colostrum available.

#1 The calf's mother.

#2 Stored colostrum from another beef cow.

#3 Stored colostrum from a dairy cow. (Beef cattle colostrum usually has a greater antibody quantity than dairy cattle colostrum.)

#4 Dried colostrum.

In Eastern Colorado, it is often not very feasible to shelter cattle during the calving process. Yet, sheltering can improve the potential for a live calf during periods of extreme cold and times with wet precipitation. The calf is very susceptible to hypothermia, particularly in the first four hours. A calf that is shivering and has not nursed may be a candidate for being moved to shelter or even a warming device. This is especially true if the calf is lethargic or has difficulty raising its head. A good test to help you determine if a newborn calf needs shelter is to place your finger in its mouth. The inside of the mouth should be warm. A cold mouth can be an indicator of hypothermia. Also, a calf that is OK should begin a sucking reflex when you put your finger in its mouth. If there is no sucking reflex and the mouth feels cool, consider this calf to be in critical condition and get them warmed up soon.

Standing to Processing (4 to 12 Hours)

I mentioned earlier that it is vital for the calf to get antibodies from the colostrum in the first four hours. These are the ones that will do the most good for the calf. Still, the calf can utilize antibodies consumed within colostrum during the 4 to 12 hour period also. The calf's digestive tract begins to change as soon as it is born. At birth it has the greatest ability to absorb antibodies and will gradually lose this ability over the first 24 hours of life. By the time the calf is 12 hours old, it has lost 50% of its ability to absorb antibodies from colostrum.

Many producers will utilize this period to process their calves. It can be easier to handle the new calf than what it may be to run down one that is a couple of weeks old. However, remember that a good mother cow will be very protective of her baby at this time and you need to be wary and alert for your safety.

Possible processing strategies:

- Tag the calf
- Record tag #, weight, sex, identifying features, etc.
- Dip the naval with iodine to prevent infections
- Castrate bull calves that you want to be steers

- Some purebred operations may use this as an opportune time to tattoo calves
- Some ranches may apply an implant to steers at this time

This is also a good time to monitor the cow to see if she has cleaned. This means to determine whether or not the afterbirth has been expelled from the cow.

The First Day (12 to 24 Hours)

If you did not process the calf earlier, this can also be a good time to do so.

Evaluate whether or not the calf is nursing. How much fullness or gauntness does its belly display? Does the calf have a bright and satisfied appearance or does it act lethargic or standing with a humped back? Does the calf act or look cold? Occasionally, even a healthy newborn calf can suffer from a lack of milk. A few cows, particularly first calf heifers, may not have strong mothering skills and refuse to allow the calf to suckle. In some cases the cow's udder may be plugged or she may have a health issue that restricts either milk production or milk "let down".

A cow that is demonstrating a mothering problem may need to be penned up in isolation with her calf for the first day or two.

The Second Day (24 to 48 Hours)

On the second day we expect that calves will be readily capable of following along with the mother cow. However, it is important to remember that the new calf will spend much of its time sleeping for the first week. So don't expect that it will be following the cow all of the time. Additionally, cows like to hide their calves to protect them from predators for the first couple of days.

When you do see the second day calf, it should look perky and well fed. Monitor it for any displays of starvation, hypothermia, or weather stress.

The Third Day (48 to 72 Hours)

By the third day we expect calves to be displaying some "spunky" behavior. They may be starting to run around, jump, and play some. Cows should have fully cleaned by now. If a cow has a retained placenta at this point, you should consider visiting with your veterinarian. He/she may want to prescribe a long acting antibiotic. In some cases they may need to physically remove the placenta.

Pairs that are doing well should be moved out of the calving area onto a large, well-drained area. This should help reduce incidents of scours and other diseases among the young calves. If there are weak calves at this point they and their mother should be paddocked in a well-drained area where extra attention can be provided. The same strategy goes for pairs that suffer from poor mothering abilities.

Remember that this needs to be a clean and well-drained area. Dirty, wet, and muddy paddocks or stalls can greatly increase the chance of death among weak or sick calves.