



River Valley Veterinary Clinic

September 2015 Newsletter

Calving Ease

When a cow goes into labor, the calving process is stressful not only for the bovine but for the humans involved as well. To ease stress all around, here is a review of the calving process, common difficulties and when to intervene or call the vet.

Start with good facilities. Monitor the close-up pen regularly, and move the cow to the maternity pen when there are feet sticking out. If she is moved earlier, the stress of being separated from the group may delay delivery. The maternity pen should be in a convenient location for observation and providing assistance. It should be clean and dry with deep straw bedding. Dusty bedding can be kicked up and inhaled and a wet or muddy area encourages bacterial growth: both can easily cause health problems for the newborn calf.

In the maternity pen, monitor the cow for progress through the three stages of labor. In Stage 1, uterine contractions position the calf for birth and the cervix dilates. The cow may be restless, off-feed, holding her tail up or leaking milk. Stage 1 can last one to 24 hours and ends when the cervix is fully dilated and the amniotic sac, or water bag, enters the birth canal.

In Stage 2, the calf is expelled by the uterus and abdominal muscles, which are actively contracting, having been stimulated by the calf's feet entering the cervix. This stage usually lasts 30 minutes to one hour in cows entering their second lactation or older, but can last up to four hours in first calf heifers. In the most common form of delivery, the calf comes out front end first and right side up with the front legs and head extending into the birth canal. A calf can often come out back end first, but still needs to be upright with its back legs extended. If the calf is in any other position, it's time to call the vet. Stage 2 ends when the calf is born. During Stage 3, the placenta detaches and is expelled and

uterine involution begins. If the placenta remains attached for more than 24 hours, it is considered retained and a vet should see the cow.

Ideally, the cow will calve on her own, but there are times when she needs help. Making the decision to assist can be difficult. Here are some guidelines on when to step in or call a vet:

- the cow has been in Stage 1 for over 8 hours
- the water bag has been visible for over 2 hours but the cow has stopped pushing
- the cow has been pushing for 30 minutes with no progress
- the cow has stopped pushing for 15-20 minutes after some progress (5-10 minute breaks are fine as long as progress is made)
- either the cow or calf is showing signs of fatigue
- the calf's tongue is becoming swollen
- severe bleeding from the vagina or rectum
- abnormal position of the calf
- expulsion of placenta or a foul odor or discharge with no sign of a calf

Or, simply stated, give us a call if you don't know the cause of the problem, how to fix it or if you know both but haven't made progress in 30 minutes.

Don't hesitate to take the time to reach into the cow to determine what might be wrong before you call. The more information you can provide before a vet arrives, the better. Clean the manure and debris off the cow's vulva with warm water and a gentle soap like Dawn or hand soap. Using a shoulder length glove will prevent the introduction of bacteria from the environment into the cow's sterile uterus. The key is to go slowly and carefully. The cervix should be dilated and the feet and head should be palpable.

Once it has been determined that the cow requires assistance, the calf must be placed in the

correct position, if it's not already there, and the chains can be placed on both feet. Proper chain placement involves placing the loop above the dew claw with a half-hitch below, which will distribute the force of pulling on the leg. The chains must also lie either on top or along the bottom of the leg; lying along the side or only one loop per leg will increase the chance of a fracture.

The maximum force should be no greater than two grown men and in time with the cow's efforts, even when using a calf puller. The calf will be able to come out if its fetlocks are six inches out (if forwards) or if the hocks are at the level of the vulva (if backwards). At these points, the largest part of the calf will be within the birth canal and should successfully come out. The calf's hips will need to be rotated to prevent them from becoming locked against the cow's pelvis. Rotate the calf 30 degrees after the shoulders are out to ensure its hips are at an angle when entering the birth canal.

The most important thing once the calf is out is to stimulate it to breathe and clear the amniotic fluid from its airway. Pouring a cup of cold water in its ears is an excellent stimulation, so is poking a long piece of straw up its nose. Rub the calf down with straw to continue stimulation and tuck its legs up to help it sit upright.

When the calf is stable, clean the cow up and feel if there is another calf, tears in the uterus or birth canal that will need attention. To prevent milk fever, all cows should receive oral calcium

and those in their second lactation or greater should receive another dose 12 hours later.

While an incorrect position is common, the vast majority of difficult calvings are due to an oversized calf. Other times, a cow that is in Stage 1 but not progressing may have uterine inertia or torsion and should be seen by a vet. Inertia is due to low calcium and the cow should be given an oral dose of calcium or even be IV'd before she will progress. A uterine torsion prevents the cervix from opening fully to allow the calf to pass. It can be corrected manually with or without a detorsion rod when the calf's shoulders can be easily reached. Otherwise, the cow can be rolled, which will roll the cow around the fetus that is being held in place by the plank on her abdomen. Another problem we see is "water belly," where the calf's belly has abnormally filled with fluid during gestation. The calf will initially readily come out but stop around the shoulders and feel stuck. Reaching in, the calf's belly fills the entire space. This condition is often incompatible with life and to get the calf out, the belly must be punctured to allow the fluid to escape.

The most common cause of injuries to the cow and the calf are due to excessive traction, so while it's important for the calf to come out, proceed carefully, patiently, with lots of lube and recognize when no progress is being made and another route must be taken. In the end, if a cow appears to be in labor and instinct says something is not quite right, we'd much rather come out and help deliver a live calf than deal with the alternative.

Introducing the "VFD"

Starting in December 2016, the FDA will require a Veterinary Feed Directive (VFD) – like a prescription, written by a vet – to use medically important antimicrobials in feed additives. Use of these antimicrobials for growth promotion will be prohibited, and their use in feed will be allowed only for the treatment, prevention or control of disease. The FDA's goal is to ensure safe food and sustainable long-term use of antimicrobials for both humans and animals. We wanted to introduce you to these upcoming changes and will provide more information as it becomes available.

A Note on Oxymer

Remember that a batch of Oxymer mixed from concentrate is good for only 24 hours before losing potency quickly. If the recipe on the bottle for a gallon makes too much for you, try 2 tsp concentrate in 1 pint of cold water instead. It will fit in a spray bottle for smaller jobs like milk pails and bottles. You can also soak milk bottles and teats in a bucket of Oxymer. If you haven't used Oxymer yet, you might try it. This disinfectant is effective against cryptosporidium and isn't deactivated by organic material. Spray it on calf hutches, maternity pens, and anything else that needs disinfecting.