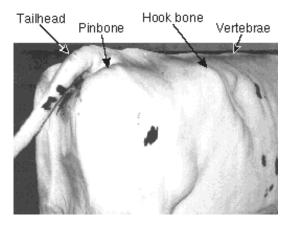
July 27, 2022

Calving Barn Protocol

- 1. Cows and heifers should be moved to individual calving pens when they are close to calving. They can be removed the next day if they have not calved.
- 2. Once an animal shows signs of calving, they should be monitored every 30 minutes.

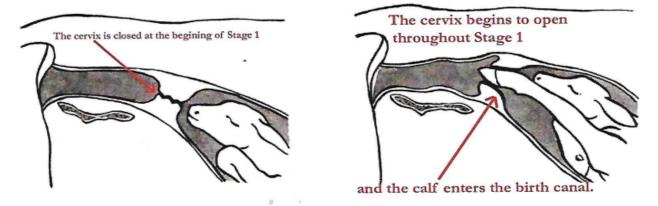
Signs of calving:

- Distention of the teats and udder
- Ligaments on tail head area loosen (1-3d)
- Vulva becomes enlarged and flabby
- Cow shows uneasiness and irregular movements
- Calf moves into the pelvic girdle
- Act of calving water bag/bladder appears, if normal, forefeet appear, water bag bursts, followed by muzzle resting on the forelegs



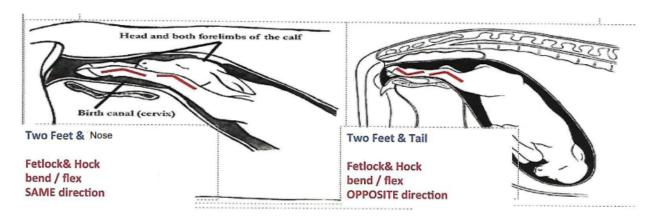
Stage 1 – Preparation

- Lasts 2-6 hours (can be a couple of hours longer in heifers)
- Begins with initial labor & ends when the cervix is fully dilated and the calf has entered the birth canal. The end of stage 1 is marked by the observation of the water sac.



Stage 2 – Delivery of the Calf

- Lasts 1-2 hours for cows and 2-4 hours for heifers, the cervix is fully dilated, the cow may lie down, contractions will increase, and abdominal pushing is obvious. This stage ends with delivery of the calf.
- The calf must enter the birth canal in a certain position to have a normal delivery. The most common delivery is when the calf is in a frontward presentation, rightside up, and with both front limbs and head extended into the birth canal.
- Backward presentations are also normal, but keep in mind that a backward presented calf is a high-risk calving because the umbilical cord is pinched off before the calf's head is delivered.



• Feel for the angles of the leg to determine if you have a front or rear leg

The calf must be in one of the above pictured positions before attempting to pull it.

Stage 3 – Delivery of the Placenta

The placenta (cleanings) should be delivered within 6 hours.

Reasons for Dystocia (Difficult calving) Include:

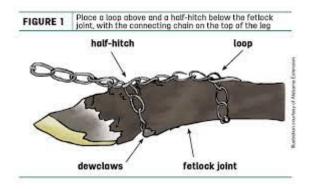
- 1. The calf is too big for the dam
- 2. Body condition too fat
- 3. Abnormal position/presentation of the fetus, or deformed fetus
- 4. Uterine torsion* (see diagram at end)
- 5. Lack of uterine contractions as occurs with milk fever

Rules of Thumb to Interfere/Assist

- Heifers: should deliver 60-90 minutes after the feet show
- Cows: should deliver 30-60 minutes after the feet show
- Other: If the cow is uneasy, nothing is showing, she is getting up and down and straining very little for several hours you need to examine the cow

Rules to pull calves

- The calf must be in one of the "normal' positions listed above before attempting to pull. It is VERY IMPORTANT that you know what you are doing and that you move quickly. If you are unsure of the procedure, PLEASE find someone to assist you. If no one is available, you can contact Centre Herd Health Services (814-364-9655).
- If assistance is needed fill bucket with warm water and a small amount of Nolvasan. Two to three ounces of Nolvasan per gallon of water is sufficient for disinfecting. Place calving chains in bucket to sanitize.
- 3. Always use copious amounts of lube!
- 4. Proper obstetrical chains and handles are very good for assisting with the birth of a calf. They are easy to apply or remove and, most importantly, they are easy to clean and disinfect. The use of dirty ropes or twine should be avoided. Always apply a chain to the leg with a loop above the fetlock (first joint) with a half hitch below the fetlock. THE POINT OF PRESSURE WHEN PULLING SHOULD ALWAYS BE ON THE TOP OF THE LEG. Failure to do this may result in a broken limb on the calf which will not heal well even if put in a cast.



- 5. If head first presentation, both shoulders should fit through the pelvis and you should fit your hand over the top of the head. Pull straight until the head and shoulders are out, and then pull in a downward direction.
- 6. If hind leg presentation, both hips should fit through the pelvis. Pull straight until the hips are in the pelvis and the tail is out. Then pull in a downward direction.

Immediately After Birth

1. When the calf has been delivered make sure that it is breathing. Rub briskly with some straw bedding or dry bath towels and make sure that all amniotic material is away from its facial area.

 \rightarrow Use the Calf Recovery Position to help it begin breathing. Do not hang the calf upside down. This causes the stomach and intestines to press down on the diaphragm and compress the lungs, making it harder for the calf to breathe. Although fluid will come out it is fluid from the stomach not the lungs.

In the "calf recovery position," calves are placed with both legs tucked underneath, the rear legs stretched toward its ears, upright on the sternum with the head and neck extended forward. This allows the lungs to expand with the least amount of pressure. Other techniques like poking straw in the nose and rubbing the calf vigorously are also effective.



- 2. Dip or spray the navel with 7% iodine IMMEDIATELY after birth.
- 3. Allow the cow to rest a few minutes before attempting to make her stand. All animals get 2cc oxytocin immediately after calving (just 1 time).
- 4. **DO NOT** leave area before the cow is up and cleaning the calf. Usually 5 to 10 minutes are enough time for them to catch their breath. If they lie down too long, possible nerve swelling will cause them to be unable to stand. If all goes well the cow should be standing and cleaning her newborn calf within 10 minutes after calving.
- 5. Follow Newborn Calf Protocol for the calf.
- 6. After the cow/heifer calves, place ½ pound of YMCP in 5 gallons of warm water and offer her 2 pails (total of 1 pound of YMCP). If the cow/heifer is still thirsty, offer her plain warm water until the cow/heifer is satisfied. If a cow (2nd lactation or greater) doesn't drink her YMCP, dose her with 1 calcium tube or Bovikalc bolus.
- 7. Make sure that the cow is milked as soon as possible after calving. If she calves overnight move her to the fresh pen where she can get feed and water. Leave a note by the time clock for the morning crew.

***Uterine Torsion** – Rectal palpation of bands can help identify presence of a torsion. Also with a torsion, ones arm can rotate or twist in either direction as it proceeds through the vagina and cervix in order to reach the calf. Sometimes the cervix and or vagina are more constrictive than usual. If you suspect a twisted uterus call Centre Herd Health Services for assistance.

