

Managing Calves after Dystocia

Many of you are in the heart of your calving season. I hope that you haven't experienced too many problems, however, I know there is probably one or two of you who have had to pull out the chains, straps or dust of the puller. The calves born to these situations have a much greater chance at experiencing mortality and/or morbidity over the next week to three weeks, even if the calf seemed unaffected by dystocia (difficult birth).

There are management practices that can greatly influence the survivability of these calves. The first step is to minimize the chance of calving difficulty prior to the calving season. It is no secret that heifers are more likely to experience dystocia than mature cows. However, of all calving difficulties, calf size is the most likely culprit. Before you purchase a bull, evaluate the birth weight EPD paying close attention to accuracy of the EPD's. Heifers should be bred to calving ease bulls that are suitable to their frame score and have EPD's that have a high accuracy. Think twice before you turn in a yearling bull with heifers if you are not familiar with his pedigree and/or breeder. It is not wise to take chances.

Be sure the cows and heifers are in good body condition prior to the calving season. Heifers are particularly affected by the amount of energy reserves her body has at the time of calving. She must be in good condition to assure that she has the stamina to go through parturition. However, a heifer or cow that is obese can experience dystocia due to fat deposits in and around her pelvis. It is suggested that heifers be a score of 6 and cows a score of 5.

It is very important to recognize when a cow or heifer is having a problem and human intervention is necessary. The following are rules of thumb to abide by; abnormal presentation of the calf, no progress for a 30 minute period, cow has quit pushing for 20-30 minutes and shows sign of fatigue, calf has blue tongue or no response to squeezing of tongue.

The average death loss in US cattle herds is 8% of total weaned calves. Half of the death loss occurs before the calf is 24 hours old and 75% of the death loss occurs by one week of age. Nine times out of ten, death is due to a non-infectious cause rather than an infectious cause (disease). The reason for death is usually because the calf has difficulty adapting to life outside of the uterus. The calf must undergo several steps in order to be resilient to environmental changes from the uterus to the ground. The calf now has to regulate respiration, cardiovascular system, metabolism, fluid balance, thermoregulation, muscular activity and on and on. Three biological states are of utmost importance: hypothermia (low body temperature), hypoxemia (lack of oxygen) and hypoglycemia (low blood sugar).

Thermoregulation is probably the most important biological function that is often compromised at birth. A calf is born with very little fat that can be mobilized for heat production and conservation. Shivering and physical activity are relied upon to maintain body temperature. However, shivering consumes a lot of energy and can cause a calf to quickly become hypoglycemic. Thus, the act of standing becomes crucial to survival. A calf that is quick to his or her feet can increase its heat production by 100%. The mother can stimulate heat production by licking the calf and you can do it by rubbing the calf dry. Drying a calf after pulling is very important if the cow is slow to show interest and can increase the rate at which the calf will stand. A newborn calf's body temperature should not be below 101 degrees, preferred temperature should be 102.5-104. Pulse should be 165-205 beats per minute.

Hypoxemia causes significant trouble physiologically. A calf should have 45-65 breaths per minute. The act of rubbing or licking a calf can stimulate breathing. There are drugs available from your veterinarian that can aid in clearing the lungs and stimulating breathing that can be given upon delivery of the calf. Hanging a calf from its feet is NOT recommended. Fluid expelled upon doing this is NOT from the lungs and this act can actually cause more trouble than good. Some producers choose to have an oxygen tank in the barn and routinely administer oxygen to the calf in the event of dystocia. Work with a local veterinarian if you choose to implement.

Hypoglycemia results if a calf does not get milk in a timely manner along with dehydration. Therefore it is very important to make sure a calf nurses within 30-60 minutes of birth. This also ensures the calf receives vital colostrum for immune response and protection from infectious diseases. It is always best that a calf stands and nurses on its own, however, if the calf does not appear to have a suckling response or is lethargic, tubing colostrum milked from the dam is recommended. Likewise, if the dam is unable to stand, drying the calf and bottle feeding the calf colostrum from the dam is wise. Make sure the calf continues to nurse regularly over the next 48 hours to ensure maximum consumption of colostrum and milk. Milk and colostrum is best from the dam, however, if unavailable, there are supplements available.

Dystocia can be costly not only due to calf morbidity and mortality, but can cause physiological problems in the dam that can delay return to heat and delayed breeding. The best management tool we can use is prevention. Match bull size to cow size. Calve during a time of year that minimizes environmental challenges to the calf. If dystocia occurs, intervene before it is too late and provide necessary husbandry to calves to maximize survival.

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