

Coping With The Cold

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Like many people, I spent the first part of January bundled up from head to toe trying my best to limit the time my bare hands were exposed to the record breaking low temperatures. As I travelled from farm to farm (with the heat cranked way up!), I found myself wondering how the animals were coping with this weather? I was particularly concerned about newborn calves who enter the world soaking wet and tuckered out! In this edition of vet's corner, I thought it would be timely to review how to deal with hypothermic calves.

Background:

Surveys have shown that beef calf mortality rates from birth to weaning can range from 3-7% with most normal deaths occurring in the first 24 hours. Of the leading causes of death within this period, difficult birth and hypothermia are the most common. There are 2 main types of hypothermia; exposure and immersion. Exposure hypothermia occurs over a longer period of time with a gradual heat loss from respiration, evaporation and lack of body condition. Immersion hypothermia is more sudden and is common in newborns and animals that get a soaking wet hair coat in cold temperatures. Immersion hypothermia is the type most commonly seen with beef calves.

Signs of hypothermia:

Shivering

Cold extremities

Pale colour

Rectal temperature <100 degrees F or 37.8 degrees C

Increased heart rate

Increased respiratory rate

Inability to suckle

Confusion, weakness

Coma-like state

Treatment:

Determining the degree of hypothermia is very important. Always take the calfs rectal temperature before treatment and monitor it regularly while you rewarm the calf (every 30 minutes). There are many proven ways to re-warm calves. These include:

- immersing the calfs body into a warm water bath
- towel dry and place under a heat lamp
- towel dry and blanketing and
- warm air dry on the floorboard of a truck or by using a hair blow-dryer

Studies have shown that while the most effort is required with immersing the calf in warm water, it is the most effective method. If the calf is severely hypothermic (body temperature below 86 degrees F or 30 degrees C), the immersion technique is strongly recommended.

Another critical treatment is feeding the hypothermic calf warm colostrum and providing warm air to breathe as soon as possible. This not only speeds recovery, it increases the probability of full recovery. Both of these therapies help to heat the calf from the inside out and provide the nutritional energy to help them overcome this challenge. Do not rerun the calf to the cold environment until it is completely dry and able to stand and suckle on its own. Be aware that the trauma of hypothermia may impact the immune system and make these calves more prone to pneumonia, scours etc so pay close attention!

When it is all said and done, if calves are caught early, it is well worth the effort to attempt re-warming - many calves make full recoveries! Happy calving season and stay warm out there!