



# CEDAR GROVE VETERINARY SERVICE NEWSLETTER



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## TIPS FOR DEALING WITH THE AFTERMATH OF THE WINTER WEATHER BLAST

Cold weather is never fun for a farm. It is downright abysmal when it reaches the arctic temperatures that the Midwest just endured at the end of January. It truly is a testament to the perseverance and strength of farmers for the way they kept working through that entire week. Now with the warmer weather, it is easy to rejoice; but all farmers should be aware of the many battles they will be fighting for the next few months as a result of the very cold weather. Two that will be discussed this month are calf pneumonia and teat end frostbite.

### **Teat End Frostbite**

Teat-end frostbite can become an issue when wind chill temperatures drop below zero. That definitely occurred in January. Ideally, damaged tissue, such as the teat ends, should be thawed with warm water that is around 105-110°F at the time of injury. However, it is often hard to determine which cows will develop frostbite teat damage until irreparable damage has occurred making this practice impractical. Once teat damage is present it is hard to know whether the teat will heal

properly prior or will be destroyed by mastitis.

The best chance any producer has to repair a damaged teat is to keep the site as free as possible of pathogens and at the same time facilitate the healing process. Skin damage heals approximately 40% faster when the wound is kept moist.

Therefore, it's important to avoid applying agents that inhibit the healing process or that have a drying effect on the wound site; iodine is one of the worst offenders on both points. Milking can also cause some re-injury and pain, but it can't be avoided due to the mastitis risk. When milking damaged teats, it is best to clean the teat with a mild soap and water solution before milking. After milking, try to apply an ointment or salve with antiseptic properties that does not inhibit healing and has good barrier properties. Interestingly, honey works well on teat injuries. It has antiseptic properties, it stimulates healing and will keep the skin hydrated. Bandaging the teat when using honey will increase its effectiveness.

Finally, the use of a topical menthol/anti-edema product

## TEST YOUR DAIRY FARMING KNOWLEDGE

- 1) How many pounds of cheese were consumed on Super Bowl Sunday in 2018?
  - a) 76 million lbs
  - b) 88 million lbs
  - c) 93 million lbs
  - d) 99 million lbs
- 2) Antibodies are important for immune health. Recent research has found that the gut is the first line of defense for the immune system. What percent of all cow antibodies are located in the cow's gut?
  - a) 45 %
  - b) 65 %
  - c) 70 %
  - d) 80 %
- 3) How many licensed cheesemakers are there in Wisconsin?
  - a) 500
  - b) 60
  - c) 1025
  - d) 1200

*Answers on back*

on the affected quarter during the healing process will promote circulation in the udder and to the teat. This will facilitate the healing process. But make sure not to apply mint or methanol products to the actual damaged teat end because it does burn. Finally, patience is required for frostbite damage because it can take up to 60 days for a teat to recover.

### **Calf Pneumonia**

Cold weather enhances the growth of certain respiratory germs on the inside of a calf's nose and upper respiratory tract. The more bacteria present in the upper respiratory tract, the more likely they'll reach the lower lung and cause pneumonia. Cold weather also thickens up mucus and impairs the work of the "ciliary escalator" – the fine hair-like cell structures that sweep bacteria and foreign material from the lower airways up to the throat to be

coughed up. Combine these risks with the effects that stress has on the immune system and it is no coincidence that cold temperature increases the risk of pneumonia in calves.

So, what can be done? Well, management practices like cleanliness, dry bedding, and proper ventilation are things that can't be put to the wayside. In fact, they will be more important as ever as the weather changes. Calves having to expend energy to keep warm because of lack of bedding or wet bedding will take needed energy away from the immune system and growth. Ventilation and clean huts/pails/bottles will reduce the likelihood that calf will pick-up a pathogen that can cause disease.

Nutrition is also important to preventing disease from cold stress. A calf's energy requirement for maintenance increases 1% for every degree the temperature drops below

the calf's thermo-neutral zone (which is between 50°F and 75°F). This means that at an average daily temperature of 25 degrees, a calf will need 25 percent more energy just for maintenance, let alone growth. In order to provide your calves with adequate nutrients when temperatures fall below freezing, consider your milk replacer choices or consider adding an extra feeding. Remember, shorting them on energy at this time of year will certainly reduce the calf's ability to fight any infection.

Finally, identifying disease early and treating early will be far more successful. It is a good time of year to re-train employees on early identification of respiratory disease in calves. It is also a good time to review with your veterinarian treatment protocols for respiratory disease in calves.

### **Update on 2018 Tetracycline Pilot Project**

In 2018, the National Conference on Interstate Milk Shipments (NCIMS) conducted a pilot project to investigate tetracycline residues in milk samples. Tetracyclines are not routinely tested for at milk plants as of now. The program required milk plants to look at 1 in 15 bulk milk tankers for tetracyclines. The tolerance level was set at 300 parts per billion. The biggest concern was that this test would yield many positives due to the heavy use of tetracyclines by hoof trimmers to treat hoof warts and digital dermatitis. The result of the program found a total of 6 positive samples in the 304,289 samples tested. This is a violation rate of 0.00197%. It remains to be seen what recommendations the FDA will make as a result of this program. As of right now, the program ended on January 1, 2019. Finally, reports from the National Milk Residue Database only found 584 samples out of 4.2 million tested that were positive for drug residue violations. This is the lowest number of violations since 2015.



### **Dairy Farming Knowledge Answers**

1) B    2) C    3) D