

Dr. Dennis G. Bardelmeier, DVM  
Ph.715-316-2369

**P.O. Box 366  
413 South 4<sup>th</sup> Street  
Abbotsford, WI 54405**



**Ph. 715-223-4700  
Fax. 715-223-4711  
info@northernlakesvet.com**

## **MASTITIS AND UDDER HEALTH TREATMENT PROTOCOLS**

### **UDDER EDEMA**

Udder edema is a swelling of the udder, teats, and, sometimes, the lower abdomen. It is uncomfortable, at best, and may make early lactation milk letdown difficult. Heifers with edema may be harder to break. Sometimes, the swelling is so severe that the skin between the udder and leg ulcerates from chaffing and becomes infected. In cold weather, swollen teats are more prone to being frostbit. If herpes mammillitis virus is a herd problem, udder edema will make it worse. Prior to freshening, furosemide can be given intramuscularly or intravenously once or twice daily as needed. Post-freshening, Naquasone boluses, if available, can be given orally for a few days. **(WITHHOLDING)**. Many people have had good luck with udder lotions and creams such as Udder Calm and Udder Mint, for which there is no withholding.

### **MASTITIS**

Mastitis is a constant threat to the health of dairy cows but also is a detriment to production. High SCC also leads to a loss of quality premiums and, in the worst case, even loss of a market for milk. Mastitis is grouped into 2 types: contagious (Staph. aureus, Strep. ag. and mycoplasma) and environmental (environmental staphs and streps and coliforms). Cultures can be performed to identify the cause of a particular case and information about the best treatment can be gained from antibiotic sensitivity testing. Unfortunately, there is a lag time to get the results back so answers come after the fact. On farm testing systems have shortened the time. Also, milk samples can be frozen prior to treatment and cultures can be done if the cow is not responding. Bulk tank cultures give good information on the types of mastitis in the herd and the contribution of the various types to SCC. This can lead to recommendations for herd control strategies. Commonly, treatment of mastitis cases is based on past experience with what has been working in a herd, milk withholding time, and drug cost.

**For treatment in the quarter, please follow this procedure. Wearing gloves, prepare the teat as you would for milking. Clean the teat end with alcohol and allow the alcohol to dry. Insert the tip of the tube partially, only as far as the indentation at the end, and infuse the medication. Teat dip after treatment.**

For cows that are not sick, have a mildly swollen quarter, have flakes or a high SCC or positive CMT, you may choose to try intramammary treat only. FDA approved treatments include Amoxi-mast, Daricloxx, Pirsue, Spectramast LC, and Today. **Each has its own labeled treatment procedures and withholding times; these directions should be followed.**

Dr. Dennis G. Bardelmeier, DVM  
Ph.715-316-2369

For cows that are sick or toxic, more aggressive systemic therapy is necessary. The condition of the infected quarter ( how swollen and painful it is), the appearance of the milk (flakes or becoming watery), how sick the cow looks, body temperature, etc., all help determine how aggressive that treatment needs to be. Anti-inflammatories like aspirin or Banamine(Flunixin) are helpful in keeping the cow eating. Oxytocin to let milk down several times daily will help evacuate the quarter. Systemic antibiotics like sulfadimethoxine 40%, LA200, and Polyflex are all commonly used, effective treatments. Supportive care will often include 2 bottles of hypertonic saline. Pumping the cows stomach with 10 gallons of water with electrolytes or hooking up intravenous fluids may be required. Some cows down with toxic mastitis may benefit from a bottle of 23% calcium gluconate; this must be given very slowly because these cows may react badly to the calcium (possibly die). Intramammary treatment as described above can also be administered.

Dry treating cows is an effective way of clearing up existing mastitis and preventing new cases. Also, more people are dry treating first calf heifers. In cows, dry treatment is administered immediately after the last milking. In heifers, treatment is administered 4 to 6 weeks before the due date. Keep in mind that dry treatments have long withholding times and an animal that freshens early may not have saleable milk for an extended period of time or may not be eligible for slaughter if culling would be necessary. The following are FDA approved dry treatments: Alba-Dry, Dry-Clox, Orbenin DC, Quartermaster, Spectramast DC, and Tomorrow. After the dry treatment, Orbeseal can be infused into each teat to seal the teat canal. Follow the intramammary infusion technique described above. **Please follow the milk and slaughter withholding requirements. Always have the milk checked before putting it in the tank.**