



Northwest Veterinary Associates, Inc.

Stephen Wadsworth, DVM
Peter Averill, DVM
Jennifer Hull, DVM
Tom Linden, DVM
Erica Sebastyan, DVM

Mastitis, Something You Should Think About From Day One

December 2020 Newsletter prepared by Dr. Sebastyan

First off, I want to thank every one of you for being so welcoming these first seven months of me practicing here in Vermont. I have learned a lot from all of you and I look forward to continuing to work with everyone and growing more and more as a veterinarian.

We all know that replacement heifers are an important part of a productive dairy. A lot of resources are spent on keeping heifers healthy and reproductively efficient so they can calve and join the milking herd. Replacement heifers should be improving the reproductive status of your herd as well as the milk quality and overall herd health.

Heifer mastitis is simply an intramammary infection at first freshening that may be clinical or subclinical. It turns out that some herds have as high as 75% of their heifers (12 to 15 months of age) to have subclinical mastitis. The most common mastitis pathogen found is *Staph. aureus* followed by other *Staph.* species although the organisms found usually reflect the pathogens that are commonly seen in that herd.

How are heifers getting mastitis?

Different pathogens and risk factors for heifer mastitis are associated with different time periods in their development. From birth to weaning age, puberty, and breeding to first calving. Heifers are susceptible to mastitis starting right at birth. The minute calves are born their teat ends are in contact with the environment and are at risk of cross suckling from other calves. *Strep. agalactiae* is associated with calf suckling in herds that feed mastitic milk to their calves. During puberty the ductular system within the gland is developing. Cross suckling, a dirty environment, and inadequate fly control can lead to bacteria within the teat canal. Minimizing teat injuries and chapping of the teats during cold weather can also increase the risk of heifer mastitis. The same risks are present from breeding to freshening while their udder continues to develop.

So why does this matter?

Heifers may be exposed to these pathogens at any point during their development, meaning they are infected for months at a time. This infection can lead to impaired udder development and damage causing decreased milk production. First calf heifers with mastitis produce 10% less milk in their first lactation compared to healthy heifers and are at a higher risk of clinical mastitis throughout their lactation. Additionally, these heifers have a higher SCC compared to heifers with



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no intramammary infection. Bottom line, heifer mastitis will cost you pounds of milk, milk quality, and heifer health.

How to detect heifer mastitis before calving?

If you want to catch intramammary infection before calving, all heifer udders should be palpated, and mammary secretions checked two months prior to calving. If the udders are hard, warm, or lumpy secretions should be collected and cultured. Additionally, if secretions contain clots or are watery, they should also be cultured. Be sure when collecting the secretions, that collection is done with clean, gloved hands and that the teats are cleaned with individual alcohol wipes before collection. After collection the teats should be dipped to prevent further introduction of bacteria. Based on culture results treatment can be started. It is important to talk with your herd veterinarian because treatment will be off label and requires a valid VCPR.

Best method of control is prevention! Methods include:

1. Housing calves separately to prevent cross suckling
2. Pasteurizing waste milk
3. Maintaining a clean and dry environment for all ages of heifers
4. Proper fly control
5. Monitor fresh heifers for mastitis prior to calving and at freshening

We at Northwest Vets want to wish everyone a Merry Christmas and a safe and happy New Year. I know 2020 was not the year people were expecting, but here is to a happier and healthier 2021!

