

## Mastitis Management

The summer months can be a challenging time to manage mastitis. Warmer temperatures, humidity and heat stress are all factors that can lead to an increase in mastitis cases on some farms. If this is the case on your farm, there are several things you can consider to help mitigate the issues associated with environmental and contagious mastitis.

As a quick reminder, **mastitis** is a disease process which causes inflammation of the udder in dairy cattle. It usually occurs as an immune response to bacterial invasion of the teat canal, but can also occur as the result of physical injury to the udder.

### Milk culturing

Knowing what bug may be causing mastitis on your farm is an important first step towards figuring out how to manage it. Doing a bacteriological culture of milk samples can identify the bacteria causing intramammary infections. Culturing not only helps determine the causes of mastitis, but can also help with treatment protocols and management. There are many options available for incorporating milk culturing into your herd management, so make sure to talk to your herd veterinarian about the best fit for your operation.



#### In-Clinic Culturing

At Heartland, we offer in-clinic milk culturing using the Minnesota Easy® Culture triplate, which is able to differentiate common mastitis-causing Gram-positive bacteria like *staphylococcus* species and *streptococcus* species, as well as Gram-negative (or coliform) bacteria like *E. Coli* and *klebsiella*. It's important to know if you are dealing with a Gram-negative or Gram-positive bacteria because it will influence what treatment to use. Often, non-severe cases of mastitis caused by Gram-negative bacteria will resolve on their own without treatment. On the other hand, mastitis caused by a Gram-positive bacteria have a higher chance of being cured when treatment with antibiotics is used. Sometimes, nothing will grow on the plate resulting in a "no growth" result, this is likely because the cow's immune system has eliminated the bacteria before a sample collection is taken (these cows also will likely not need treatment). For more information on how to collect/store a milk sample, which cows are good candidates for culture, and when to culture them, talk to your herd veterinarian.

## Management

Along with milk culturing, there are many other management strategies that can be used to minimize the effects of mastitis on your herd including vaccination, good milking hygiene (e.g. wearing gloves, proper udder preparation, thoroughly cleaning equipment etc.), and using dry cow treatment and teat sealant as appropriate. Other important management considerations include housing dry cows in a clean environment, providing adequate nutrition (energy and protein are important to support a healthy immune system), and keeping good records (e.g. what bugs have been cultured on your farm, and any patterns like seasonality in mastitis infections). As always, we at Heartland Veterinary Services are invested in the health and productivity of your herd. If you want more information on mastitis management, please talk to your herd veterinarian or any of our veterinarians, we would be happy to help!

Enjoy the rest of your summer everyone!

Dr. Daniella Rizzo, DVM

## Upcoming Stat Holdidays

The clinic will be closed for Labour Day, September 2-5. As always, veterinarians will be available 24-7 for emergency service. The Saturday fee schedule will remain unchanged from non-stat weekends.

## Fly Control

Have you heard the buzz? Large animal technicians are now offering fly prevention in combination with dehorning services. Ask your large animal tech for more information!

