

NAVAN VETERINARY SERVICES MARCH 2013 NEWSLETTER

Mastitis continues to be one of the most frequently encountered types of infection on our farms today. Now six months into the new lowered maximum bulk tank somatic cell count (BTSCC) of 400,000, what changes have we noticed?

Even though most farms were well below the threshold for BTSCC, prior to August last year, the new measure did prompt many producers to re-examine how they dealt with cows with ongoing (chronic) high SCC's. Of all the information provided from DHI test day, individual cow SCC is probably one of the most frequently reviewed pieces of information.

Most researchers in mastitis will define chronic infection as those cows with 3 elevated SCC's (greater than 200,000) in a row. For most farms on 10 tests/year, this represents 110-120 days of infection. Those farms on less frequent milk testing cows with 3 high tests in a row represent even longer standing infection.

SCC data should be used to help producers make decisions on whether to treat or not treat a particular cow. It would take a much longer newsletter than this one to discuss the many different bacteria and microbes that cause intramammary infections.

Each microbe has its own unique mechanisms that provoke either mild, moderate or severe reactions to infection. Some bacteria like Staph aureus can cause infections with a wide range of severity. Very mild reactions (subclinical infections), where the milk is visibly normal and the cow and udder seem quite normal is often the most common expression. The only evidence of infection in this scenario is an elevated SCC. DHI test samples will identify these cows. Staph aureus bacteria can also cause one of the most severe infections we encounter, gangrenous mastitis

Staph aureus continues to be one of the leading causes of chronic mastitis in Ontario dairy herds. The success in treating "Staph" cows really depends on how quickly the infections are identified. Once well established, these infections respond very poorly to treatment. One rule of thumb in deciding whether to treat or not is...

- 1) There should not be more than 3 high SCC's in a row (chronic).
- 2) None of the high SCC's is greater than 1,000,000.
- 3) Younger animals tend to respond better than older cows.

It is critical in herds hovering in the 250-300,000 BTSCC to use the DHI high SCC information. All high cows (>200,000) should be cultured to identify what microbe is causing the infection. Cows with new infection or ones that fit the above criteria should be considered for treatment. Please ask your vet for info on selecting the proper antibiotic for the particular infection.

When sampling cows, use a predip product and leave on for 30 seconds. Wipe off, paying particular attention to the teat end. If using alcohol swabs, scrub the teat end aggressively before sampling. When sampling high SCC cows, quarter samples should be taken, 4 samples per cow. Some bacteria are present in very low numbers, and success of getting a positive

culture is increased by having individual quarter samples. It also makes interpretation of the results by a lab a lot easier and relevant. DHI offers a PCR test to help identify a few types of mastitis causing organisms including Strep ag, Staph aureus and Mycoplasma. These tests are extremely sensitive as they are identifying strands of bacteria DNA sequences in a milk sample.

They do not identify intact bacteria in the milk. Because culturing and growing the organism is the “Gold Standard” in identifying a true infection, information obtained from a positive DHI PCR test should be used (in my opinion) as a potential positive infection, and confirmed by way of culturing.

Our annual Spring Meeting will be held on Friday March 22 at St.Marys Hall, Navan.

Dr. David Reid will be the speaker. The focus of the meeting will be milk quality. Dr. Reid travels internationally to help dairies solve problems with all aspects of milk quality.

Please let us know if you are attending by Tuesday March 19 so that we can organize the meal plans.