

Stay on Top of the Heat or You Might Get Burned

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Summer is here and it is time to forget about the cold of winter and enjoy the heat of summer. Ultimately, with summer there is heat and with heat comes humidity. For many farms, with the heat of summer comes an increase in Somatic Cell Counts (SCC) between July and September each year.

This is particularly important because in 2017, Dairy Farmers of Ontario adopted a change in the penalty structure for elevated bulk tank SCC. Under the new structure, if forty percent or more of the pick-ups in a three-month period are above four hundred thousand SCC, a first level penalty will occur. This change in penalty structure combined with the summer SCC risk caused an increase in penalties last year. In July 2018 there was an increase of 128% in penalties, in August a 246% increase, and in September, a 231% increase in penalties compared to the same months in 2017. This emphasizes the importance of monitoring SCC for each bulk tank pickup - every pickup counts! If a pickup tests above four hundred thousand SCC, it is time to start investigating the cause of the elevation. Which cows are contributing to the elevated tank? Are there cases of clinical mastitis? What management of the cow's environment is contributing? The summertime heat increases the risk that subsequent pick ups will also be high therefore if you leave it until the next tank is over four hundred thousand and then the next one, incurring a penalty may become a real risk.

Summer heat and humidity allows for two factors that cause increased SCC - the proliferation of bacteria in the environment and reduced immune function in heat stressed cows.

In order to combat the summer SCC risk, we need to monitor the cow's environment, especially the temperature and humidity. Reviewing heat abatement protocols is an important first step. Is forced ventilation adequate to cool the environment for the cows? Could water sprinklers be used to help cool heat stressed cows? At the same time, we need to ensure bedding is clean and dry at all times. High levels of moisture in bedding and the presence of manure will increase the numbers of bacteria present. Environmental mastitis pathogens such as E. coli love these moist and dirty conditions. Scraping stalls multiple times a day and frequently adding clean dry bedding will also help decrease the amount of bacteria in the stalls.

Another important factor is ensuring that the teat ends of cows are well protected from the bacteria that are in the environment. This can be done by following proper milking procedures including the use of appropriate pre and post milking dips which help to reduce the bacteria that can enter the teat canal and cause mastitis.

Another factor that should not be forgotten is making sure that feed is of good quality and free of mycotoxins, adding appropriate binders if needed. Harvesting feed under appropriate conditions and properly compacting silage will help reduce the presence of mycotoxins.

Regular consultation with your herd veterinarian to review your protocols, management, and SCC records can help make sure the goal of low SCC is met.

The National Mastitis Council has many resources that can help with managing herd SCC, including strategies to employ as part of a successful Mastitis control program. Some recommendations that are particularly important in the heat of the summer include:

- Maintenance of a Clean, Dry, Comfortable Environment
- Proper Milking Procedures
- Proper Maintenance and Use of Milking Equipment
- Good Record Keeping
- Appropriate Management of Clinical Mastitis During Lactation
- Effective Dry Cow Management
- Maintenance of Biosecurity for Contagious Pathogens and Marketing of Chronically Infected Cows
- Regular Monitoring of Udder Health Status
- Periodic Review of the Mastitis Control Program

If these recommendations are met, then the risk of high SCC in the summer should be reduced and there will be a lower chance of incurring a penalty. Then you can enjoy the warmth of the summer before the cold winter is back!

References:

www.nmconline.org

<http://www.scc200.ca/>