



# DAIRYINFO

## **Bedding Management ~**

Summer heat and humidity bring numerous challenges to livestock and people. Among the challenges is the more rapid growth of bacteria in organic bedding sources and resulting risk of higher somatic cell counts (SCC) and clinical mastitis. Improved bedding management can help increase profit potential and reduce early lactation infections this summer.

A review of DHI records indicates that 35% of first lactation heifers started milking with probable mastitis infection. In addition, 35% of older cows also had probable infections in their first month of lactation. Most of these early lactation infections are probably due to risk factors in the first 3 weeks after cows are dried-off or two weeks prior to calving. Studies also indicate that over half of all clinical mastitis cases that occur in the first two months after calving actually began during the dry period. Bedding is among the risk factors likely contributing to these infections. Susceptibility to infection is greater in early and late dry periods and around calving due to the changes in the immune system of both cows and heifers. These are often times when bedding management is a lesser priority. It is critical to pay careful attention to bedding management during these important times in a cow's production cycle, as well as the climatic conditions of summer and early fall. Good bedding management is important to reducing new infections after calving.

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## **Studies estimate the average production loss of cows that calve with mastitis is 680 kg less than for cows with no infection in early lactation.**

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Prevention is the best solution! The potential loss of profit due to new infection can be substantial. A reduction in infections before and after calving can make a real difference in your bottom line. It begins with good management. Heat and humidity create an ideal environment for bacteria to grow and thrive. Be sure to not only keep stored bedding dry, but also regularly clean all bedded areas. A regular system of cleaning and replacing bedding in dry cow and bred heifer groups can impact the health and productivity of your herd. I would be happy to review your bedding management program with you in the near future. It's worth the time and can impact your herd.

*(Edited from an article by S. Costello, Penn State Dairy Alliance)*

**PRESERVE FORAGES THIS YEAR  
CONTACT ME FOR INFORMATION**

## **Coping with summer!**

Heat stress occurs when a dairy cow's heat load is greater than her capacity to dissipate the heat. Cows exhibit signs of heat stress in several ways, such as increased respiratory rates, water intake and standing time, decreased dry matter intake and slower rate of feed passage, decreased milk production and reduced reproductive performance. Ultimately, these can have an economic impact on any dairy. The severity of heat stress is measured by using a temperature humidity index (THI), which uses both temperature and humidity to calculate the theoretical level of stress to the animal.

It is critical that cows "cool off" when the weather is hot and humidity is high! This helps to reduce the negative effects of heat stress. While we cannot control weather-related factors, we can provide ways to alleviate the impact of heat and humidity on livestock:

1. Sprinklers and fan cooling systems
2. Continuously available fresh, clean water
3. Shade
4. Appropriate rations for times of heat stress

Areas that require special attention may include:

- ◆ Holding pen – often a place where cows are crowded and heat gets trapped around animals with little relief (see June 2016 edition of newsletter).
- ◆ Exit lane cooling – an ideal place to use sprinklers as cows leave the parlor; works as a supplement to good holding pen heat abatement.
- ◆ Freestalls and feeding areas – cows spend most of their time here. These areas need to have adequate ventilation and a continual source of fresh water. Additional cooling may be obtained with fans, shade or sprinklers, etc. Ensure bedding does not become wet.

Last - the cows' diet. Changes in ration formulations and summer feeding procedures can help to reduce the effects of heat stress on dairy cows. Changes should be made slowly and [preferably] prior to the onset of hot weather. One of the goals is to ensure the cows maintain dry matter intake. Rations should safely accommodate the need for additional energy and possibly undergo an increase in DCAD (dietary cation-anion difference). "Cool off" your cows this summer. Call today for information and be proactive before hot weather arrives! It can make a positive difference.

*(Edited from Strategies to Control Heat Stress, Kansas State University)*

*Interested in discussing topics in this newsletter, or want to do a better job feeding and managing your cows? Call us!*

*Our goal is to help you. That's the W-S Feed commitment!*

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SOLUTIONS FOR SUCCESS**



## ***When it comes to heat... don't forget the calves!***

As summer temperatures rise, heat stress can negatively impact calf performance, causing rapid dehydration and reducing immune function. Researchers have determined that heat-stressed calves often have reduced circulating immunoglobulin concentrations and increased stress hormone concentrations. Elevated body temperatures can result in very sick calves with reduced growth rates, lower feed intakes, and higher maintenance energy requirements. When ambient temperatures exceed 80°F/27°C, calves must burn more energy in order to dissipate heat from the body by sweating and increasing respiratory rate. In this case, less of the nutrients consumed are devoted to growth and their average daily gains suffer. Efforts should be made to identify and avoid heat stress in calves. Increased respiratory rates, open-mouth breathing, decreased appetite, and a reluctance to move are symptoms that your calves may be suffering from heat stress. This summer, consider the following tips to assure proper calf health and growth is maintained: reduce sun exposure; improve air flow in calf-housing areas; use sand bedding, which does not insulate like straw or hay; **provide fresh, clean water free-choice**; and avoid additional, unnecessary stressful situations like moving and vaccinating during times of heat and humidity! (Edited from an article by Dr. Andrew Holloway, ELANCO)



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# ***JULY 2016***

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# ***CHECK IT OUT!***