

Lameness Hurts

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Lameness is the most severe welfare problem in dairy cattle, and it has a detrimental effect on cow longevity. Each case of lameness causes a loss of income for the farm. Reducing lameness is a priority for Dairy Farmers of Canada and Dairy Farmers of Ontario and it is evaluated for proAction as part of the cattle assessment done by Holstein Canada.

The number of cases of lameness varies by farm, but lameness is a disease that is present on all farms. All farms should strive to decrease the number of lame cows they have. Unfortunately, high production is a risk factor for lameness and increases the chance of having lame cows on the farm. Lameness is something that needs to be monitored at all times. We must approach lameness in the same manner as we approach mastitis. With mastitis the cow is evaluated immediately to see if treatment is needed or not. Similarly, the lame cow needs to be evaluated as soon as possible to determine the appropriate treatment.

Lameness is painful and results in depressed feed intake. Lame cows can experience up to a 30% reduction in milk yield. And is associated with greater culling and impaired fertility. On top of loss of milk other associated costs due to lameness are additional hoof trimming and treatments such as antibiotics, bandages, and blocks.

So how do we decrease the number of lame cows on our herds? The key is to monitor for lame cows and once they are seen, they need to be examined in the foot chute as soon as possible. This protocol alone could decrease the number of lame cows up to half. Delayed treatment is a risk factor for high levels of lameness on a farm. Once a cow is chronically lame it is very difficult to make them sound again. Early treatment leads to more rapid recovery and fewer repeat treatments.

Once an animal is in the foot chute, she should have a therapeutic trim to evaluate the issue. Depending on the cause of lameness, topical antibiotics or a block may be needed and can be applied immediately. NSAIDs, a group of pain medications are often warranted to help with the associated pain. Research has proven NSAIDs are extremely useful in preventing the same cow from being lame again in the future. The cow should then be placed in a box stall with deep bedding or pasture to reduce the time on concrete and be reassessed in a few days to see if further treatment is needed. Re-evaluation should continue until the lameness is gone. If the lameness continues and treatment has failed, on-farm euthanasia may be necessary as severely lame cattle are not fit for transport.

Digital Dermatitis (DD), also known as hairy heel warts, or strawberry warts, is the most common lesion on farms. The key to preventing DD is to make sure the environment is clean, particularly keeping alleys scraped to prevent cows from walking through a slurry of manure. Routine foot baths are used to prevent DD. The only products with good research proving that they are effective are 2-5% formalin or acidified copper sulphate. Proper foot bath design is needed as well allowing for each foot to be immersed twice on the way through the bath. The footbath should be at least be 9 feet in length to accomplish this. The frequency of how often you run a foot bath will be dependent on the farm situation. The higher numbers of cows with DD, the more frequent the bath, ranging from 2-7 days per week. We must remember that the foot bath is not a treatment, it is a preventive like pre and post dip are for mastitis. The lame cow still needs to be placed in the foot

chute for treatment. Overtime, the number of footbaths per week can be reduced as the number of cases decrease. However, footbaths need to be done at a minimum of two times a week to prevent DD from spiking again on the farm. Monitoring lameness event records are the key to success.

Two other common foot lesions on farms are sole ulcers and white line disease. Again, the only way to diagnose these lesions is to place the cow in the foot chute. To prevent these lesions many factors must be evaluated. Proper flooring is important to ensure minimal slip and to maximize the catch of the hoof. Overcrowding is another factor which contributes to lameness as cows will be standing longer waiting for a stall to lie down in or waiting to eat at the feed bunk. Another risk with overcrowding is TMR sorting where the first cows to feed get more than their fair share of grain resulting in sub acute ruminal acidosis (SARA). Stall design and comfort is key to decreasing lameness. The more comfortable the stall, the more time the cow will lay down and decrease the time spent standing on concrete. Deep bedded barns such as those with sand have fewer lame cows than other types of bedded barns.

A huge factor in decreasing lameness is to have a foot trimmer visit frequently, ideally every 1 to 2 months depending on herd size. Once or twice a year is not adequate to address lame cows, plus it allows preventative trimming to be performed more frequently.

Lameness is multifactorial, and it requires a multifactorial approach to correct it. Involve your herd veterinarian and hoof trimmer to help you make a plan on how to monitor and decrease the lame cows on your farm. We must not forget the dry cows and heifers and have a plan for them as well. It is a challenge our farms have struggled with for many years, but one we must solve for the basic well being of our dairy cows.