

Prevention is the key to better individual and herd mobility

A series of farm events organised by Stride, the UK dairy mobility initiative, have highlighted the importance of early prevention to reduce the consequences of poor mobility on individual cow and overall herd health. British Dairying reports.

Mobility remains a major issue on dairy farms, but a greater focus on prevention will help reduce issues across all farm systems. That is one of the major conclusions from the recent national mobility survey conducted by Stride, a not-for-profit industry initiative headed up by partners Ceva, HerdVision, IVC Farm Vets, Neogen and Zinpro.

“Our survey highlighted that acting quickly is crucial if we are to bring mobility issues down from the current stubbornly high levels,” says Matt Dobbs, Chair of the Stride technical board.

Early detection

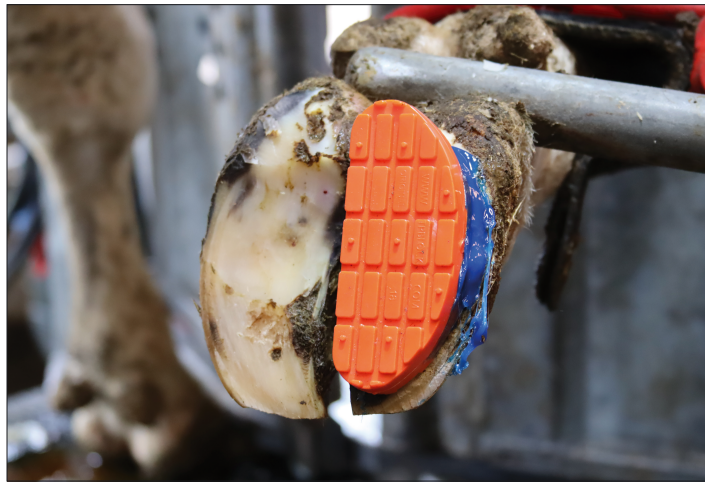
“Prevention will always be better than cure, helping reduce the incidence and costs of compromised mobility. Farms should focus on early detection and prompt, effective treatment. The sooner an affected cow is assessed and treated the lower the costs and losses will be,” he explains.

“As much of 80% of foot health problems are attributable to recurrent cases in the herd, so farmers need to implement comprehensive prevention protocols to help avoid mobility issues becoming a chronic problem.”

Once a cow becomes lame, inflammation will damage the foot tissue, predisposing cows to repeat



Gillian Whitehurst



Blocks should be checked and replaced every four weeks as necessary

problems. “Chronic lame cows will end up being culled, so we need to prevent the progression to chronic disease,” says Gillian Whitehurst, Clinical Director at Glenthorne Vets.

Observation and early identification remain the foundation of earlier intervention and prevention of lameness, yet uptake of mobility scoring is variable.

Changing attitudes

So there needs to be a shift in attitude towards mobility scoring - it must be seen as an effective way to pick up changes in mobility quickly, and not just as a benchmark or to fulfil the requirements of the milk processor. Frequency of mobility scoring needs to be increased too, Gillian says.

“Any cows flagged up as score two should have feet checked within a maximum of 48 hours. Cows at score three must be checked quicker.”

“It is inevitable that if you mobility score more frequently there will be a peak of score two and three cows to treat initially as you get on top of problems, but this should be a short-term issue.”

Affected feet should be trimmed and a block applied if required, says Gillian. A poorly positioned block is worse than no block, and blocks should be checked and replaced every four weeks as necessary.

One of the keys to reducing the consequences of foot lesions is reducing pain and inflammation.

“All inflammation is painful, and lameness is no different, so if we reduce pain, it will be beneficial in helping cows recover,” says Katherine Timms, Ruminant Veterinary Adviser at Ceva Animal Health.

“Including a non-steroidal anti-inflammatory drug (NSAID) in your treatment protocols will help reduce both pain and inflammation,” she notes. “Reducing inflammation is particularly important.”

“Reducing pain and inflammation is a significant step to take.”

NSAIDs will also reduce a fever - but importantly, they are not antibiotics. They can be incorporated in treatment protocols alongside other prevention and treatment measures.

“If we want to reduce the consequences of lameness, reducing pain and inflammation is a significant step to take, yet uptake is still variable,” says Katherine.

“The results of the Stride survey showed that while 24% of respondents used an NSAID on all lame cows, and around 55% routinely used them on score three cows, 8% of farmers were not using NSAIDs with any lame cows, missing the opportunity to reduce inflammation and pain.”

The biggest reasons given for not mobility scoring cows more often are the time taken to both score cows and interpret the results, and having suitably trained staff. This means many farms rely on a Register of Mobility Scorers’ (RoMS) trained professional and inevitably less frequent scoring.

Automated scoring

“One option to overcome these issues and to ensure problem cows are spotted sooner and more consistently is to use automation,” suggests Georgia Thresh at HerdVision.

“Camera technologies mean milking cows can be mobility scored every day, with the data analysed and problem cows automatically reported. The data is saved to an app which is accessible by people across the farm team, meaning problem cows can be seen sooner.”

“Initially the HerdVision system will help highlight score two and three cows, but as prevention strategies start to be effective the



Georgia Thresh at HerdVision

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focus can turn to early identification of score one cows, allowing you to get on top of early identification and treatment.” The camera can also be used to score heifers and dry cows, allowing early intervention across all animals on the farm.

“It will also provide data to highlight trends, which in turn will suggest where management changes could lead to a sustained reduction in compromised mobility,” says Georgia. “For example, there might be a problem with a specific building, possibly indicating an issue with cow comfort.”

And improving cow comfort can have a significant impact on mobility and productivity. Tony Hall at Lallemand emphasises the importance of compromised mobility on cow time budgets, pointing out that lame cows will not be spending their time in the optimum way.

Productive time

“Like humans, cows only have 24 hours in a day, and we expect them to do a lot in that time,” he says. “We need to help them spend their time in the way they want if they are to be as productive as possible.”

Cows need to spend three to five hours/day eating and 12-14 hours lying down - with lying time most important, notes Tony. Recumbent rumination, where cows are lying down ruminating, is crucial - so make it a priority to ensure they can lie down for long enough, whether housed or grazing.

“We want our cows lying down, ruminating and producing milk,” adds Tony. “There is plenty of research showing a strong correlation between the time spent lying down and milk yields. “So we need to do all we can to encourage cows off their feet,



Tony Hall at Lallemand



Jonathan Thomas-Nash at Neogen advises footbathing three times a week

because if they spend too much time standing, then they have too much weight-bearing time, which can cause problems. Equally, if they have any foot discomfort they will be less likely to lie down, as it will hurt to get up again.”

The key to getting cows to lie down is cubicle comfort and size. Farmers should ensure sufficient lunging and bob space, so it is easy for cows to lie down and stand up. “If it is hard to do this, then cows will take the easy route and just keep standing, which is the last thing we want,” says Tony.

Cubicle comfort

“As cows get bigger, so cubicles need to grow, and we need to make them as comfortable as possible. Cows prefer a more compressible and softer lying surface. Comfortable cubicles and giving cows plenty of time off their feet are big aids to mobility, but also to milk production.”

Cow comfort is also crucial in the transition period to help reduce the consequences of compromised mobility, says Jonathan Huxtable at Zinpro. Lameness is a transition disease and cows with increased lameness do not transition well.

Compromised mobility in transition cows will result in lower dry matter intakes (DMI) in both pre- and post-calving cows.

“If DMI is reduced, cows will mobilise body fat, including fat from the foot pad, which will predispose cows to foot problems,” says Jonathan. “If we manage transition cows better we can ensure higher DMI and prevent loss of the footpad.”

Transition cows need plenty of space, so no more than 80% occupancy is required in transition

cow housing, while cubicles should be larger to accommodate the increased size of heavily pregnant cows. “If cubicles are too small, cows will find it harder to get in and out, increasing the stress on the ankles, hooves, tendons and ligaments, resulting in a greater risk of compromised mobility,” explains Jonathan.

“Set a target of zero lameness in dry cows. Carry out a hoof check two weeks before drying off and rectify any problems at this stage. Then, putting cows in a good environment with reduced stress will give them the time to rest and recover.

“Breeding cows for enhanced mobility should be a priority.”

“It will also be important to footbath dry cows as they enter the dry cow group, to help reduce the prevalence of digital dermatitis-inducing bacteria.”

Jonathan Thomas-Nash at Neogen agrees with the need to footbath dry cows, and stresses the importance of regular footbathing as part of an effective prevention programme.

“Ideally we need to be footbathing the milking herd three times a week to help disinfect feet,” he says. “Choose a footbath solution with proven efficacy and use it at the correct dilution.”

New footbath disinfectants have improved chemistry to work against pathogens effectively, says Jonathan. It’s important to remember that

disinfectants do not treat existing problems, but prevent new infections.

Putting cows through a carefully formulated and balanced footbath solution can deliver three important benefits. “Firstly, it will help keep feet cleaner by removing soil. Secondly, it will disinfect the hooves, and finally, skin conditioners will help promote better hoof condition. Just using a disinfectant like formalin will not improve skin condition.”

There is no harm in footbathing heifers, either. Heifers will hopefully be on the farm for at least seven years so it’s important to keep them as productive as possible; therefore ensuring they are good on their feet should be a priority.

Genomic testing

“One of the ways to achieve this is to genomically test all heifers as calves and then choose which to breed,” explains Jonathan. “Within six weeks of birth, you will have an informed view of her lameness probability.

Breeding for cows with a better genetic predisposition for enhanced mobility should be a priority, making use of the Lameness Advantage score.

“Lameness Advantage is also incorporated into the profitable lifetime index (PLI), so high PLI cows are less predisposed to lameness. Then, having bred for good feet you should try to maintain them,” he adds. “We know that a significant proportion of lameness in any herd are repeat cases in cows that have already been lame, so let’s do all we can to keep feet sound.

“Where possible, put in-calf heifers through the footbath as often as the cows and certainly once a week. As well as helping to maintain healthy feet, it gets them used to the routine before they calve.”



Jonathan Huxtable at Zinpro