



‘Double-dip’ key to hoof health

Paying closer attention to all aspects of footbathing plays an important role in preventing hoof-health issues. So what are producers doing well and what could they do better?

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Implementing a comprehensive prevention programme is the most cost-effective way to reduce the consequences of poor foot health and compromised mobility in dairy herds, with footbathing a fundamental component of any programme. However, quoting the findings of the recent Stride National Dairy Mobility Survey, Neogen’s Jonathan Thomas-Nash says that footbathing could be more effective on many units, presenting an opportunity to improve hoof-health management. “The survey showed that the majority of units are equipped to footbath at least some of the cattle on farm, with 90% having a fixed or mobile footbath,” he says. “But the results for frequency of use paint a different picture and suggest that footbathing isn’t as widely adopted as it could or should be.”

Jonathan Thomas-Nash:
“Each foot must pass through the solution at least twice”



Just 78% of survey respondents were footbathing milking cows weekly or more frequently, while 4.5% put milking cows through the footbath monthly or less often. On 11% of units, milking cows were never footbathed, either due to a lack of facilities or no perceived need.

Digital dermatitis

“Several respondents said that they only footbath cows if there was an outbreak of digital dermatitis or a ‘flare up’, which goes against the principle of using footbathing to help prevent problems,” he says. The figures for dry cows and heifers are even lower. A quarter of respondents never footbath dry cows, and 47% never put heifers through a footbath. Those who did footbath heifers did so only occasionally, usually combined with other activities.

“While perhaps not surprising, the low uptake among heifers is disappointing because there are significant benefits to developing robust foot health during the youngstock rearing period,” says Mr Thomas-Nash. “The overriding conclusion from the survey was that an increased focus on prevention is important to improve foot health and mobility, and footbathing has a crucial role to play in this,” he adds.

◀ He stresses the importance of understanding what footbathing can deliver within a hoof-health improvement programme, principally helping to reduce the incidence of infectious conditions. Foot health issues are either non-infectious, such as sole bruising, or infectious, like digital dermatitis (DD). “Routine footbathing will not have a significant impact on non-infectious conditions, but is a proven way to help reduce problems with the infectious pathogens responsible for DD,” he explains.

Three elements

Three key elements are necessary for infections to develop: the presence of bacteria, poor hygiene that increases the risk of bacterial transfer, and compromised skin condition that makes it easier for bacteria to infect the hoof.

“You will never eliminate any of these elements, so reducing the incidence of infectious conditions must begin with maintaining a balance between bacteria, skin condition, and hygiene,” says Mr Thomas-Nash.

“But it is important to recognise that footbathing with a proven solution is not a way to treat existing lesions,

because it doesn’t have anti-inflammatory properties. “What footbathing will do extremely effectively is help to reduce new infection rates, reducing the risk of disease-causing organisms and the spread of bacteria, by improving foot hygiene and disinfecting the hoof surface.”

Putting cows through a carefully formulated and balanced footbath solution can deliver three important benefits. It will help to keep feet cleaner by removing soiling, although it is also vital to keep passageways as clean and dry as possible.

Frequent slurry and manure removal from dairy housing by scraping or flushing, ideally a minimum of three times per day with particular attention to high traffic areas, will help to keep feet clean. Ensuring cubicles are well-bedded and the correct size will also encourage cows to lie down, again keeping feet cleaner and drier.

The second action is to disinfect hooves. “An effective solution will ensure good skin contact with a powerful disinfectant proven to be effective against the major bacteria. And, finally, skin conditioners will help promote better hoof condition,” says Mr Thomas-Nash. “Just using a disinfectant, such as formalin, will not improve skin condition.”

Skin condition

Neogen Hoofshield Advance contains a unique combination of disinfectant, surfactants, and conditioners to improve hoof quality and provide an initial barrier against infection. It has been proven to be 99.9% effective against the specific organisms responsible for DD and is free from formaldehyde and copper. It can also be used to disinfect tools, such as hoof knives, which can also act as vectors and pass infection between hooves and cows.

“Making footbathing a part of the daily milking cow routine is the most effective way to stay on top of infections and maintain better skin condition, but producers must ensure it’s done effectively,” stresses Mr Thomas-Nash.

He adds that achieving good foot coverage in the bath is key. “As cows walk through the bath each foot must pass through the solution at least twice. The footbath needs to be deep enough, typically 10cm, to cover the dew claw.”

The blue dye in Hoofshield Advance clearly shows which cows have used the bath and if all feet have been fully submerged.

“The solution must also be diluted correctly for effective disinfection – at 1% for standard situations. Increase the concentration to 1.25% if hoof condition requires attention or DD is a significant problem.”

Regular solution replenishment is also crucial to maintain its efficacy – ideally after every 250 cows. In most cases, cleaning out, disinfecting and replenishing the footbath three times a week is sufficient, according to Mr Thomas-Nash.

“While ensuring the footbath is regularly replenished takes time, it takes considerably less time compared to treating an infected cow. And footbathing is also less stressful for both the cow and the people involved compared to tackling hoof-health issues.” |



Good coverage: ‘blue’ formula provides a visual aid