Stride focus 03

MANAGING FOOT INFECTIONS

Infectious foot conditions remain a major cause of compromised foot health and poor mobility in dairy herds. Taking steps to reduce their incidence can have a significant impact on performance, health and welfare and unlike other lameness conditions, they provide an opportunity to achieve quick results.

The 2024 Stride National Mobility Survey confirmed that producers identified digital dermatitis as the most widespread cause of reduced mobility and foot problems in their dairy herds, while foul is a lesser but still common problem.

Infectious lesions were reported as more common in larger and higher yielding herds but occur across all herd sizes and levels of production. They were also reported as more prevalent in herds housed for a greater proportion of the year.

Infectious foot conditions are often acutely painful and while eradicating them as a cause of lameness in your herd may be a challenge, there are a number of steps producers can take to reduce the prevelance and the impact of these infections.

Complete the checklist to see how big an opportunity there is to tighten management of infectious lesions in your herd to achieve better mobility and where you could improve.

CHALLENGE YOURSELF	YES	NO
Do you know the incidence of infectious lesions in your herd?		
Do you know any specific problem issues with your buildings or management that are contributing to the problem or acting as causal factors?		
Are staff trained to be able to identify cows with infectious lesions?		
Does the team have a system in place to identify problem cows, report them and instigate prompt treatment?		
Are milking cows footbathed regularly? Many herds will be foot bathing cows at least 3 days a week?		
Are dry cows and youngstock footbathed?		
Do you have clear protocols for replenishing and refilling the footbath?		
Do you have protocols for the prompt treatment of individual cows with infectious lesions?		
Are staff trained how to treat infectious lesions including any pain relief medication?		
Are alternatives to antibiotics used to treat infectious lesions?		
Are full records kept of all treatments?		
Are treatment records reviewed regularly to identify trends or areas for improvement?		

Every question answered no represents an opportunity to improve the management of mobility.

PREVENTION AND TREATMENT

Successful strategies to reduce the consequences of infectious lesions require a combination of prevention measures, early detection of problems and prompt treatment.

Three key elements are necessary for infections to develop: the presence of the infectious agent, poor hygiene that increases the risk of bacterial transfer, and compromised skin condition making it easier for bacteria to infect the animal. It may not be possible to eliminate any of these elements, so reducing the incidence of infectious conditions must begin with maintaining a balance between the cleanliness of the feet and the population of bacteria, the skin condition, and the hygiene of the cows' environment to help reduce disease pressure and prevent lesions.

Then when lesions occur these must be treated quickly and effectively to reduce the degree of severity impacting the cows' health and to help reduce the likelihood of infected cows further contaminating the environment.

CLEAN FEET

The foundation of effective prevention is taking all steps to keep cows' feet clean. Ensure passageways are scraped regularly, ideally a minimum of three times per day with particular attention to high traffic areas, and that cubicles are comfortable to encourage cows to lie down. Ensure building design does not create areas that are difficult to scrape, therefore allowing the build-up of manure.

Make footbathing a central pillar of infectious lesion prevention. It should be easy to do and part of the daily routine. The Stride survey showed the majority of farms are equipped to footbath at least some of the animals on the farm, with 90% having a fixed or mobile footbath. But the survey also showed that routine footbathing isn't as widely adopted as it could or should be, with many farmers seeing it as a treatment solution only and not as a regular preventative strategy.

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

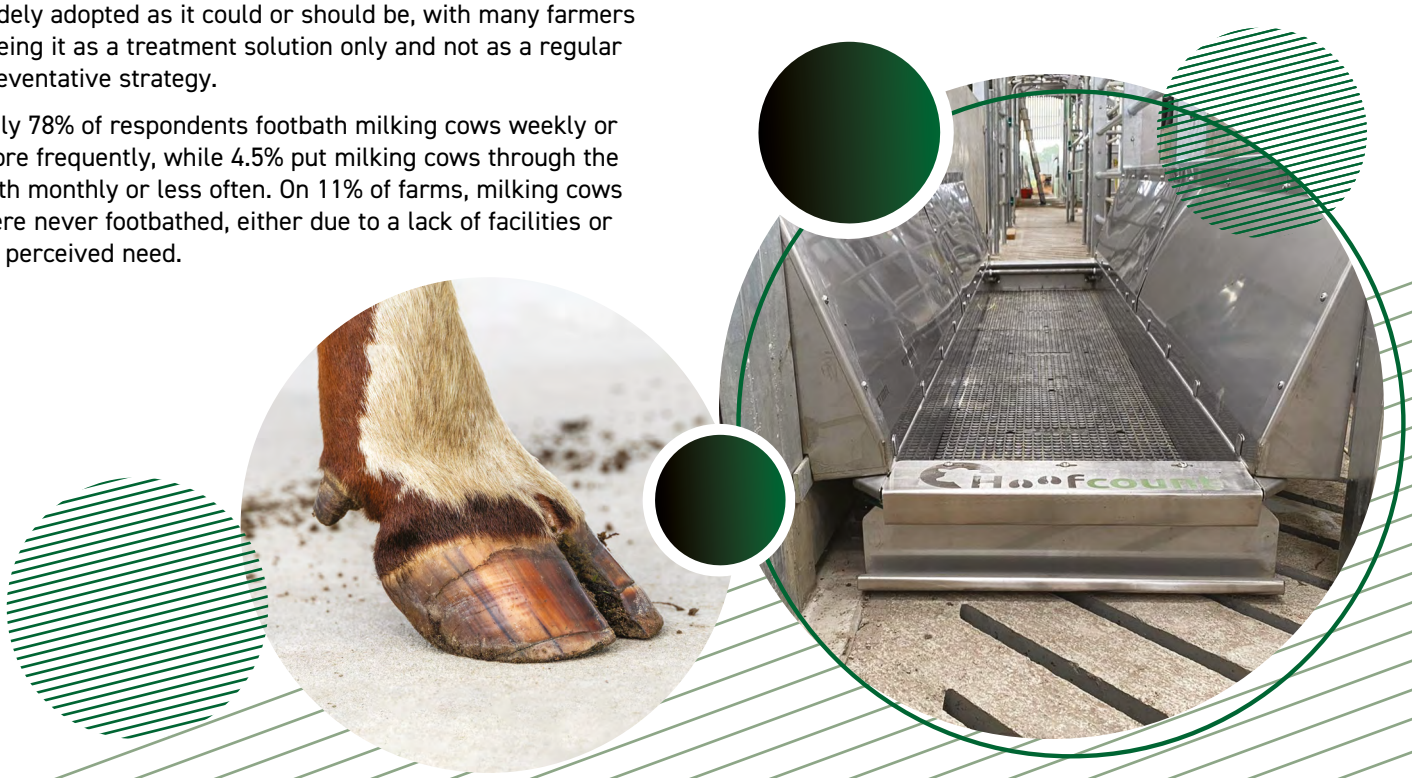
Footbathing should be viewed as a preventative measure, keeping cows' feet clean and reducing pathogen load, not a treatment for existing lesions. Yet on some farms cows were only footbathed if there was an outbreak of Digital Dermatitis or a flare-up of infectious foot problems.

To ensure footbathing reduces new infection rates and the spread of bacteria, the most important thing to put in a footbath is all of the feet of all the cows in the herd, so the emphasis should be to make footbathing as time efficient and unobtrusive as possible. It should be an easy task to do, not overly time-consuming, safe and part of the daily routine.

- Install a correctly sized footbath to allow each foot to be emersed at least twice as cows pass through it.
- Make sure the footbath is well sited so that cow flow is not impeded
- Have clear protocols for footbathing – which cows and when.
- Make sure the footbath solution is at the correct concentration, depth and replenished regularly. If the solution is not at the correct concentration it will be less effective. The whole foot to the coronary band should be immersed in the bath.
- Clean the bath regularly to remove slurry and soiling. An automated footbath will ensure the solution is always clean and at the optimum concentration."

Putting cows through a carefully formulated and balanced footbath solution can deliver three important benefits.

- It will help keep feet cleaner by removing soiling
- It will disinfect the hooves and reduce pathogen load.
- Skin conditioners will help promote better condition of the soft tissues in the hoof



EARLY DETECTION AND PROMPT EFFECTIVE TREATMENT (EDPET)

It may never be possible to totally prevent lesions occurring, so it is vital they are treated as soon as they are detected to minimise the consequences to both the affected cow and her herd mates. Infectious foot conditions are acutely painful and will impact on the cows lying time, feed intake, milk production and quickly have secondary effects on BCS and fertility. The sooner and more effectively a lesion is treated, the less the long term impact on the cow's health will be.

The Stride survey shows that while many producers rely heavily on the vet and foot trimmers to treat cows, which can delay intervention, more than 50% of respondents used the farm team to check and trim cows proactively between foot trimmer visits. This gives the best chance of addressing problems quickly. All acutely lame cows should have their foot lifted as soon as possible and ideally within 24 hours of the onset of lameness.

To achieve this, members of the dairy team must be trained to be able to detect and identify signs of hoof lesions as early as possible. They must then know the protocol to follow for early treatment, which should be developed in conjunction with the farm vet.

There should always be someone on farm able to treat infectious foot conditions promptly. If the person mainly responsible for mobility is off farm, someone else should be given the responsibility to administer first aid and pain relief to prevent foot health deteriorating.

Protocols for early treatment of lesions should address the following stages:

- Clean the skin to removing soiling. This allows good visualisation of the lesion.
- If required, trim the hoof to ensure the correct weight bearing
- Thoroughly dry the hoof and the soft tisues of the foot
- Apply a treatment such as a hydrophobic gel barrier to the lesion
- Consider pain relief
- Update records of the treatment given.

Antibiotics have traditionally been used to treat foot lesions, but increasingly non-antibiotic treatments have become available, allowing effective treatment while helping to meet antibiotic reduction use targets. Non -Steroidal Anti-inflammatory (NSAID) treatments may be needed to minimise the pain and support a quick recovery.

Should a lesion need to be bandaged, it is important to remember what the bandage is trying to do. Primarily its role is to keep the lesion dry and to protect it from the environment, giving it time to heal. Many bandages can actually trap water and debris close to the lesion which makes them less effective than hydrophobic gel barriers.

The easier something is to do, the more likely it will be done well, and this is certainly true of treating feet. Ensure the foot trimming crush is in good working order so feet can be trimmed safely with minimal stress to the cow. Consider investing in a new crush – the return on investment from treating lesions quicker and more effectively can be significant.

And ensure you have all you need to treat hooves. Carry out regular stock checks so there's a ready supply of topical products and treatments.

THE MODEL TO IMPROVE MOBILITY

The combination of a focus on prevention combined with early identification and treatment of lesions can form an effective strategy to help reduce the costs and impact of infectious lesions, based on the model of measure: manage: monitor.

MEASURE

GETTING THE PICTURE OF WHERE YOU ARE AND THE OPPORTUNITIES FOR IMPROVEMENT

INCIDENCE, CAUSES AND CULLS

What are the major causes of infectious lesions and the incidence of them. How many cows are culled as a result? What factors are contributing to the problem?

COUNT THE COST!

What is the cost to the business of infectious lesions?

MANAGE

MAKING CHANGE HAPPEN

PREVENTION

Review and update protocols for keeping buildings clean and regularly scraped. New buildings should be designed with passageways to dissipate manure burdens. Ensure protocols for footbathing are up to date and known by the whole farm team.

TREATMENT

Ensure you have a protocol for early treatment of lesions and have the facilities to allow this to be done quickly and effectively. Protocols should include how to effectively address the lesion in the foot and when pain relief is necessary.

TRAIN

Make sure all staff are trained in the protocols for foot bathing and for treating individual cows with infectious foot problems. Review the roles and responsibilities of each team member regularly.

MONITOR

KEEPING TRACK OF PROGRESS

RECORDING

establish routines for recording the incidence of infectious lesions. Compare performance against national benchmarks but more importantly against previous levels of disease in your herd.

ANALYSIS

use foot trimming records and mobility scoring records to identify where further improvements can be made

TOP TIPS

1. Keep feet clean – this is a non -negotiable requirement of reducing infectious foot problems!
2. Make footbathing a routine activity – not just for when disease outbreaks occur
3. Implement Early Diagnosis Prompt Effective Treatment to ensure cows are treated efficiently

CONTRIBUTORS

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Our Partners

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Our website

In association with cowmanagement

www.stridemobility.co.uk