

SHORT RISK ASSESSMENT

The following exercise is designed to help you to determine the general physical areas or management areas **on your farm** which may contribute to lameness problems. Part 1 covers factors which may increase the risk of new cases of lameness. Part 2 covers the monitoring, treatment and control of lameness.

Read each explanation (white boxes) and then grade the level of the problem relating to that general area of management **on your farm**. Use the statements/checkpoints (in blue boxes) to help you grade each area of influence on the scale of 0 (not a problem) to 4 (a serious problem), on your farm. NB There may be other features or indicators on your farm within the general subject area which are not covered by the check points listed.

If any of the general areas are shown to be a problem in your farm situation, you will need to consider how the risk can be reduced. Refer to the Full Risk Assessment (on pages 10 - 13) for more detail on a section.

You can shorten the exercise by concentrating on a particular lesion - the lesions most influenced by each of the management points are shown by the letter codes:

SU - Sole ulcer, **WL** - white line lesions, **DD** - digital dermatitis, **FF** - foul in the foot

Part 1. Preventing lameness by reducing the risks present

		Not a problem	Grade					Serious problem
			0	1	2	3	4	
A	Lying time	SU						
	<p>It is important that cows are able to rest lying down for as long as possible. Studies show that, when grazing, cows will lie for as long as 14 hours per day and that lameness is increased where lying times are reduced. We can encourage cows to lie down by providing them with a comfortable lying area.</p> <p>There is swelling, hair loss or scabbing on cows' hocks or knees, indicating that the lying surface may be too hard or too abrasive. Cows make more than one attempt to lie down, or knock against the cubicle/stall partitions while lying down, indicating that the dimensions or design may be restricting them. Animals lie out of cubicles, indicating that the lying surface or dimensions may be inadequate, or cubicle training has not been carried out successfully.</p>							
B	Involuntary standing time	SU						
	<p>It is important that the amount of time cows are required to stand is kept to a minimum so that their opportunity to lie down is not restricted.</p> <p>Cows have to stand for longer than one hour in the collecting and/ or dispersal yards during milking, or in separation areas with no bedded lying area e.g. AI stalls. There is less than 60cm/cow of feed space or less than 10cm/cow of water space, which may result in cows standing while waiting to eat or drink.</p>							
C	Hygiene (slurry management)	SU WL DD FF						
	<p>Slurry in the yards and passageways acts as a reservoir for the organisms that cause infectious diseases such as digital dermatitis. Exposure to slurry also softens the claw horn, causing it to wear down more rapidly and increasing the risk of claw lesions such as sole ulcer and white line disease. It is therefore important to minimise the amount of slurry in the environment of the cow.</p> <p>There are large quantities of slurry in yards and passageways or a build up of stale slurry in areas difficult to scrape. Cows have a layer of slurry higher than the dew claws, or slurry balled on the dew claws, indicating repeated exposure to deep slurry. In tie-stalls, the ends of the beds are wet and dirty.</p>							
D	Floor/ walking surface (other than cow tracks)	WL						
	<p>Uneven floor surfaces can cause physical trauma to the claw horn. Twisting and turning movements on uneven surfaces may lead to separation of the white line. Injuries to legs and feet can also occur if cows slip on smooth concrete or slats.</p> <p>There are rough, damaged, uneven, slippery or slatted floor surfaces in yards or passageways</p>							
E	Tracks, gateways and outdoor water sources	WL FF						
	<p>Rough tracks may cause physical damage to the claw horn, or interdigital skin. Claw horn may also be softened and more vulnerable to damage if the tracks and gateways are wet. Interdigital skin can become damaged with risk of infection causing foul. Studies have shown that cows will select the most suitable parts of a track to walk on if allowed to walk at their pace. This may reduce the effects of unfavourable track and gateway surfaces.</p> <p>There are stones, rubble, flints or grit on tracks, gateways or around outdoor water sources, cows walk long distances on hard/rough tracks or there are steep slopes, sharp turns or other bottle necks on cow tracks</p>							

SHORT RISK ASSESSMENT

		Not a problem	Grade			Serious problem
F	Cow flow	WL				
	<p>Sharp turns and steps may cause separation of the white line because of strains and stresses on the feet. Narrow or blind ending passages may force cows to make more twisting and reversing movements, especially if they are bullied by dominant cows in these areas.</p> <p>There are narrow or blind ending passageways, large steps, sharp turns or steep slopes in the yards or passageways or on the route through the parlour. There is competition for feed space, water or popular areas.</p>	0	1	2	3	4
G	Herding	WL				
	<p>Pushing cows up in the collecting yard can cause further twisting and turning. If there is insufficient space then cows will raise their heads and be unable to place their feet carefully to avoid hazards. Cows' heads will also be raised if they are rushed when being herded between the farm and the grazing.</p> <p>The rear cows are hurried (especially using dogs or vehicles) when being herded on tracks and/or cows are pushed up in the collecting yard (especially using backing gates)</p>	0	1	2	3	4
H	Management of high risk periods	SU WL				
	<p>The period immediately following calving is stressful, especially for first lactation animals. Fresh calved cows and heifers have to adjust to a new diet, increased time standing (around milking and while eating), change of housing and introduction to a new group of cows.</p> <p>First lactation heifers are housed with adult cows in early lactation, fresh calved cows are housed in cubicles, cows or first lactation heifers are observed lying out of cubicles.</p>	0	1	2	3	4
I	Biosecurity (reducing disease spread between cows in the same herd)	DD				
	<p>While it is not clear how digital dermatitis spreads between the feet of different cattle, it is possible that this and other diseases may be transferred directly via infected hoof trimming equipment and hands.</p> <p>Digital dermatitis (and other infectious diseases) could be spread between cows or management groups on the farm by mixing age groups, scraping slurry from infected groups to non-infected groups or failing to disinfect hands and hoof knives between treating the feet of different cows.</p>	0	1	2	3	4
J	Biosecurity (reducing the risk of new diseases entering the herd)	DD				
	<p>If there is no digital dermatitis in the herd then it is important to maintain high biosecurity standards to prevent the disease infecting your herd. If you don't know what digital dermatitis looks like then see the lesion reference pictures for some examples and descriptions</p> <p>Buying in new cattle, allowing your cattle to mix with cattle from other farms or having visitors to the farm, particularly if they work on cows' feet, could all introduce digital dermatitis. The organisms could be present on animals or in slurry or manure.</p>	0	1	2	3	4
K	Nutrition	SU WL				
	<p>Upsets to rumen stability, in particular reductions in rumen pH, can cause disruptions to claw horn growth. This results in weaker claw horn which is susceptible to trauma or penetration by foreign bodies and therefore lesions causing lameness.</p> <p>Does the ration contain less than 50% forage, more than 18.5% protein, more than 25% starch and sugar, less than 35% NDF or less than 45% DM? Are any cows ever restricted from access to forage for longer than an hour (e.g for milking, AI, PD)? Are there sudden changes in diet for any animals? Any of these, among other factors, could upset the rumen balance and affect horn growth and quality, or, in extreme cases cause acute laminitis.</p>	0	1	2	3	4
M	Claw trimming	SU WL				
	<p>Overgrown and abnormally shaped claws result in damaging pressure on the internal parts of the feet, preventing the growth of healthy horn. Regular examination of the claws is important so that preventive or corrective trimming can be carried out if necessary. Correct claw trimming is a skilled task requiring training and practice.</p> <p>Are there cows with overgrown or poorly shaped claws, or is claw trimming carried out by an untrained person?</p>	0	1	2	3	4

SHORT RISK ASSESSMENT

Part 2. Treating and controlling existing lameness cases

The following points are designed to identify areas where improvements of monitoring or treatment of lameness cases may be made to help control lameness and improve recovery rates.

		Not a problem	Grade	Serious problem		
L	<p>Identifying and monitoring lameness cases SU WL DD FF</p> <p>Regular observation of all cows to identify new cases is important for earlier treatment of lameness. Keeping good records of lameness cases and the types of lesions seen when treating lame cows will help to identify the causes of problems, seasonal patterns and high risk periods. Lesion records can also be used to identify outbreaks of infectious disease such as digital dermatitis at an earlier stage and allow footbathing routine to be stepped up in response.</p>	0	1	2	3	4
	<p>The herd is not assessed for lameness on a regular basis; lameness may not be detected within 24 hours of onset. New lameness cases and repeat treatments are not recorded and monitored over time.</p>					
M	<p>Treatment of lame cows SU WL DD FF</p> <p>It is essential that cows showing signs of lameness are promptly examined and where necessary receive appropriate treatments</p>	0	1	2	3	4
	<p>Cows are not examined within 24 hours of lameness being detected; farm staff responsible for treating lame cows have not had recent training in claw trimming; there is no comfortable hospital area for lame cows.</p>					
N	<p>Footbathing DD FF</p> <p>Good footbathing practice can help to treat and control infectious diseases, especially digital dermatitis, in the whole herd. It can also be helpful in situations of widespread heel erosion or soft soles. However, footbathing can be ineffective if not appropriately carried out.</p>	0	1	2	3	4
	<p>Footbathing will not be effective if: the frequency of footbathing is less than once a week, the footbath solution is not at recommended strength, the solution is not replaced often enough, the footbath is less than 7.5cm deep or 2.4m long or footbathing is not started until after cows are housed or a disease outbreak has started. If cows' feet are dirty when they enter and exit the footbath, effectiveness is also reduced.</p>					

NOTES

For more information on any of the categories, refer to the detailed risk assessment.

Once you have completed this exercise, list the points which need attention. Think about ways in which the risks could be reduced, seeking advice if necessary. Write an action plan and follow it. - See next section for action plan tips.

