

Why prevention of lameness is vital

“Prevention is better than cure” is a common saying, but we don’t always have proof of this in real life. However, when it comes to lameness in dairy cows, new scientific evidence shows that preventing lameness in the first place is an absolute must for control of lameness at the herd level.

A recent study of dairy herds in the UK showed:

- around 80% of lameness events in the cows studied were associated with previous lameness events, and
- at least 58% of lameness events occurred in a cow that was lame within the last 4 months.

This work builds on the findings of a 2013 Australian study, which found that if a cow had signs of damage on her feet 3-12 weeks into her lactation, she was up to seven times more likely to have signs of the same kind of damage 10 weeks later.

Other studies have shown cows that have repeated lameness events eat less, produce less milk and are harder to get back into calf. This in turn leads to many cows getting culled before their time because of recurring lameness.

Avoiding that first lameness event should therefore be the focus of your lameness management strategy. You will get a far better return on your time, money and labour compared to investing these resources once a cow has already become lame.

There are many ways to reduce the risk of dairy cattle developing lameness. The new Healthy Hooves manual explains these in detail and provides advice on managing different types of lameness.

You can view the manual, download it or order a free printed copy from the Healthy Hooves website healthyhooves.dairyaustralia.com.au/healthy-hooves-resources.



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The farm practice areas shown to have the biggest impact in reducing lameness are:

Low stress stock handling practices

- o **Avoid using dogs.** Research in New Zealand showed that in pasture-based dairy systems, the number one risk factor for lameness was having a dog running around the cows. If you have farm dogs, they should be under control, or preferably tied up when you are moving the cows.
- o **Patience.** Giving cows plenty of time when they are walking along laneways, through the dairy and especially in the yards. This allows cows to sort out their herd pecking order and see where they are placing their feet. If you see cows’ heads up, the cows are too tightly bunched - they need more time and space.

Good farm Infrastructure

- o **Laneways.** Laneway design and maintenance is very important to avoid damage to cows’ feet. In seasonal herds, the dry period is a good time to address any laneway issues, so that in early lactation, when the traffic is heavy there is less risk of damage to feet.
- o **The collecting yard and dairy.** Avoid stones being dragged onto the yard from the laneways. A nib wall at the entry to the yard can be helpful. Also, assess the entry and exit to the dairy. Are there any sharp turns? These can cause white line problems in the back feet. If you do have sharp corners, think about laying some rubber matting to protect the cows’ feet. Also give the cows plenty of space and time to make those tight turns.
- o **Drainage.** Wet feet become soft and very prone to physical damage and infection from the bugs that live in the soil. In wet, muddy conditions, you can’t avoid feet getting wet, but try to avoid situations where the cows are standing in water or wet mud. Moving cows to well-drained paddocks could help minimise lameness during wet periods.
- o **Footbaths.** Footbaths can help prevent infectious diseases being spread between cows (particularly digital dermatitis; a growing concern in Australia). But it is absolutely vital that they are used and maintained correctly, and the disinfectant solution must be regularly changed. Read more details in the Healthy Hooves manual.



Regular lameness scoring

Regular lameness scoring of the herd not only picks up lame cows in the early stages before they become severely lame and hard to treat, but helps monitor the overall rate of lameness in the herd. If more cows than usual are becoming lame this indicates that the risk factors on the farm may not be well controlled. You can learn how to lameness score cows using the videos on the Healthy Hooves website healthyhooves.dairyaustralia.com.au/healthy-hooves-resources

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Cow nutrition and hoof care

Once you have addressed the basic risk factors above, looking after the cows' feet can also help with avoiding lameness.

- **Hoof trimming.** It may not be necessary to trim the whole herd, but before calving it may be useful to check the feet of cows with a history of lameness and those with overgrown claws. These cows will be at higher risk of lameness in the coming lactation.
- **Nutrition.** It was once thought that body condition loss usually occurs after cows go lame. However, recent studies have shown that cows that lose a lot of body condition have thinner fat pads in their feet, which means less cushioning and a higher risk of developing lameness in the first place. Acidosis, sometimes caused by too much grain (compared with fibre) has also been associated with lameness. ■■



| Score | Walking speed | Stride | Weight bearing | Backline | Head |
|---|---|---|---|---|---|
| <p>0</p> <p>Walks evenly</p> <p>No action required</p> <p>This cow is normal</p> | <p>Confident. Similar walking speed to a person. Maintains position in the herd.</p> | <p>Long, even and regular. Rear foot placement matches front foot placement.</p> | <p>Evenly placed and weight bearing when standing and walking.</p> | <p>Straight (level) at all times.</p> | <p>Held in line or slightly below the backline and steady when walking.</p> |
| <p>1</p> <p>Walks unevenly</p> <p>Minor action required</p> <p>Record and keep an eye on her - some cows normally walk unevenly</p> | <p>Not normally affected, should easily maintain position in the herd.</p> | <p>May have uneven stride and/or rhythm. Rear foot placement may miss front foot placement.</p> | <p>May stand or walk unevenly but difficult to identify which leg/s are affected.</p> | <p>Straight when standing, may be mildly arched when walking.</p> | <p>May have slight bob and or may be held lower than normal.</p> |
| <p>2</p> <p>Lame</p> <p>Action required</p> <p>This cow is lame and needs to be reported, drafted and examined within 24 hours</p> | <p>May be slower than normal; may stop, especially when turning a corner.</p> | <p>Shortened strides rear foot placement falls short of front foot placement.</p> | <p>Uneven - lame leg can be identified.</p> | <p>Often arched when standing and walking.</p> | <p>Bobs up and down when walking.</p> |
| <p>3</p> <p>Very lame</p> <p>Urgent action required</p> <p>This cow is very lame and needs urgent attention. Draft and examine as soon as possible</p> | <p>Very slow, stops often and will lie down in paddock. Cannot keep up with the healthy herd.</p> | <p>Shortened and very uneven. Non lame leg will swing through quickly.</p> | <p>Lame leg easy to identify - "limping"; may barely stand on lame leg/s.</p> | <p>Arched when standing and walking.</p> | <p>Large head movements up and down when walking.</p> |

Visit healthyhooves.dairyaustralia.com.au for more details about the Healthy Hooves lameness prevention program.