animal matters

Lingering lameness - why?

Farmers care deeply about their cows, which is why reducing and treating lameness remains a priority. Recent overseas research on claw horn lameness has highlighted three key risk factors, explains DairyNZ's Vanessa Robinson.

Three key risk factors

The research illustrates three key risk factors for claw horn lameness (white line and sole disease), which are environmental factors, the 'calving effect' and previous lameness. Issues caused by environmental factors should sound reasonably familiar (hard/rough surfaces, stock handling, walking distance). We've also already discussed the calving effect in *Inside Dairy*'s July 2019 issue (see dairynz.co.nz/inside-dairy).

However, the third key factor, previous lameness, bears further explanation. The overseas research shows cows that have had more bouts of lameness in the past are more likely to get lame in the future. While we don't know whether that applies to New Zealand dairy cows yet, lameness experts believe it could be significant.

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Previous lameness and its effect

With repeated bouts of claw horn disease, the inflammation in the hoof results in the pedal bone laying down new bone, altering its shape. The altered bone shape then no longer fits well within the hoof wall. This causes abnormal pressure and further damage to the sensitive tissue below the bone.

Cows in this situation are more likely to become lame again, and this downward spiral of disease is very difficult to stop.

Once a cow becomes chronically lame, each subsequent case of lameness becomes more difficult to treat.

This could also explain why it takes time for the benefits of herd-level lameness interventions to become apparent. Because those cows in the herd with chronic lameness are likely to have bone changes that can't be reversed, intervention benefits may not be seen until new cows come into the herd.

Reducing the risk of permanent damage

Even with good management, some cows in the herd may still become lame. What's important to reduce the risk of permanent changes to the pedal bone within the hoof is to identify and treat these cows as early as possible.

- 1. Identify lame cows early through regular locomotion scoring (see dairynz.co.nz/lameness-scoring).
- 2. Treat cows effectively transfer the animal's weight off the affected claw and use anti-inflammatories. Ensure all your staff are trained, or use a vet or hoof trimmer.
- Record all cases of lameness in DairyNZ's Healthy Hoof app (download it at dairynz.co.nz/healthyhoofapp). This will also contribute to accurate New Zealand data collection.
- 4. If you need more support, contact your local Healthy Hoof provider (see **dairynz.co.nz/healthyhoof**).

