

PREVENTING LAMENESS IN HEIFERS

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Why is it so important to prevent lameness?

Lameness is a debilitating and painful condition that can have hugely negative effects on animal productivity, as well as severely compromising welfare. Lameness affects the cow's normal behaviour: she will lie down more to rest the painful limb and therefore will eat less; she will also be less likely to show normal oestrus behaviour. The stress hormones released because of pain can interfere with the normal functioning of the rumen, and interfere with the endocrine system that regulates the reproductive system. As a result, lameness can significantly reduce milk production and fertility. These negative impacts mean that lame cows are at a greater risk of early culling.

Preventing lameness is of particular importance in heifers. Research has shown, that if a cow becomes lame once, she is much more likely to become lame again in future. As such, lameness in dairy heifers can have a severe impact on their overall lifetime performance within the herd.

When a lameness episode occurs, structural changes occur within the hoof. New bone can grow on the surface of the pedal bone (the bone in the hoof) with the result that the forces acting on the sole of the hoof can be altered, leading to a vulnerability in the hoof that puts cows at greater risk of lameness. Essentially, when a cow or heifer becomes lame for the first time, she is now at greater risk of becoming lame for the rest of her life. Therefore, delaying the first episode of lameness for as long as possible is key to life-long hoof health and maximising overall lifetime performance.

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How to prevent lameness in heifers

All of the measures we take to prevent lameness in cows apply to heifers. This involves managing all the environmental risk factors to prevent damage to the hoof, and instituting an effective hoof care programme, including early detection and treatment (for more information, [click here.](#))

However, two measures are particularly important in heifers:

1. It is very important to introduce heifers to the main herd before calving. Within the herd, cows have a particular social structure, which the introduction of new animals can disrupt, leading to aggression and fighting. This behaviour can lead to slipping and twisting which causes hoof damage. It is best, therefore, to introduce heifers to the main herd well before calving, so that the social issues can be resolved before calving time when their hooves are at their most vulnerable to damage (because of the relaxation of ligaments caused by hormonal changes; for more information, see the February 2025 [Hoof HealthCheck Bulletin](#) on the AHI website).
2. In addition, remember that heifers can be a little more nervous and excitable than older cows. Therefore, gentle handling is extremely important with heifers; again, the aim is to minimise any behaviour that is likely to cause trauma to the hoof (rushing, running, slipping, falling)

Key point

Preventing lameness in heifers is very important to reduce the lifetime risk of lameness. By delaying the first episode of lameness as long as possible, you can reduce the number of times a cow is lame throughout her life, thereby significantly improving her milk production, fertility and productive lifespan.

