

Footbathing is an essential means of controlling digital dermatitis and heel horn erosion in dairy herds which suffer from these conditions. It is not a cure, and attention should be paid to reducing slurry contamination of the feet in the environment in order to reduce the prevalence of these conditions. Ensuring good scraping of passages, comfortable cubicles and a floor area in the housing of at least 5m<sup>2</sup> per cow are all important ways of achieving this. However, even with a good environment most people find it necessary to footbath regularly.

## Key requirements:

1. **The right animals** – don't forget the dry cows
2. **The right frequency** – this will vary depending on whether grazing or not. Housed herds should be looking to treat at least 3 days per week.
3. **The right volume** – 1L per cow per treatment is a good rule of thumb. A typical 200L bath will therefore do a maximum of 200 cows for 1 milking.
4. **The right product at the right concentration** – there are plenty of products out there, so it is important that you check dilution rates. See below for a guide:
  - **Formalin** – 3 days a week at 5%, or daily at 3-4%
  - **Copper sulphate** – 3 days a week at 5%. Can be used at 2% if mixed with weak organic acids.
  - **Organic acids, peracetic acid, hypochlorite** – check individual products, but generally need to be used twice daily 7 days a week at 1%.
  - Formalin is the most effective product, but has health and safety implications. If you can smell it from the parlour, use an alternative product.
  - Ensure you comply with safe disposal requirements
5. **Cow flow** – the process of footbathing must be stress free for you and the cows. For this to be the case, you need a bath which is easy to fill and clean and which the cows are happy to walk through without holding up milking. It needs to be large enough to bath the whole herd (see above), and have a step in height of 25cm to hold a solution of 12cm depth (to ensure 10cm remains for the last cow). The length should be around 3.6m to ensure each foot is immersed 4 times. The width should be calculated to give you the correct volume. The whole bath should be set in a race with a width of 90cm for Holstein cows.
  - *E.g. for 200 cows you need a footbath holding at least 200L. If the footbath is 3.6m long and holds a solution 12cm deep, then it needs to be 50cm wide. For 250 cows it should be 60cm wide. A small herd should use a large bath for 2 milkings rather than shorten the length of the bath.*
6. **Prewash?** – Though not essential, a prewash bath does help reduce the amount of dung in the treatment bath. The size requirements of this are less important, but it should be similar to the treatment bath if it is not to get too mucky. It should be sited about 3m before the treatment bath to minimise any dilution effect and maximize the effect of ensuring cows dung before they enter the treatment bath.