### 10 signs that show smart spraying is the future

**D** dairyglobal.net/health-and-nutrition/health/10-signs-that-show-smart-spraying-is-the-future/

March 16, 2023



Keeping the hooves of dairy cows in optimal condition all year round doesn't have to be an expensive, or difficult task. Important is to know the variables to keep the hooves healthy and under control in the periods between hoof trimming. In the past hoof bath or mats were often used, but these methods will become obsolete. These 10 'signs' show that smart spraying is the future.



Because all hoof baths and mats become quickly contaminated with manure during use, there is no fresh product to touch the hoof after a while. With a spray application, whether with low-pressure, battery or automatic robot sprayers, each hoof receives a fresh application with a strong adhesion, which is a condition for true success.



Applying a spray product in milking robot or by back-pack sprayer on every claw.

## **2** Reduction in the frequency of treatment

Traditional hoof bath protocols often prescribe a minimum treatment of 2 days per week after each milking, i.e. more than 4 times per week. There are even mat protocols that require a 24/7 routine. With our spraying protocol, only 1 application per week meets the need to keep the hooves healthy. Knowing that consistent adherence to the protocol is essential, set a specific time in the week to have a greater chance of success with implementation.



#### Decrease the amount of product required

For a traditional 200 litre foot bath, 10 litres of product are often added and used to pass through 200 cows. So, 50 ml per cow, which counts with a frequency of 4 times to 200 ml per cow per week. Spraying just one time a week only requires around 25-40 ml per cow.



A hoof bath requires extra labour to place the bath correctly, prepare the solution, (re)route the cows, refill the bath after 100 passes and clean it after use. This should be done at least 4 times a week. Spraying in the milking parlour or at the feeding fence is much faster and easier. Furthermore, it saves time because spraying only needs to be done once a week and a ready-to-use spray like <u>Intra Hoof-fit Spray</u> requires no preparation time.



Spraying makes it easier to treat the whole herd in one go, saving time, money and resource.



#### Economic benefits that count

Weekly bathing costs about  $\in$  15 – 40 per cow per year when using questionable products such as formalin or copper sulphate. For 24/7 hoof mat concepts, the annual costs even exceed  $\in$  80 per cow. A year-round spraying approach can be done for less than  $\in$  10 per cow, which offers every farmer considerable cost savings.



#### Use for the whole herd

Hoof baths and mats only reach the lactating cows. Knowing that heifers from 1 year onwards are the reservoir of hoof problems and that dry cattle is an ideal period to get the hoofs back in optimal condition, it is important not to forget these important groups. Spraying makes it easy to reach the whole herd and ensures that the new or returning animals in the lactating barn start with excellent hoof condition.



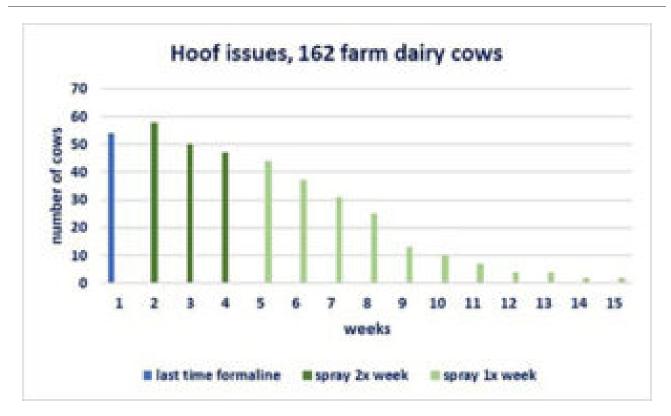
Copper sulphate and formalin contain the hazard symbols that they are corrosive to equipment and skin. Furthermore, formalin has recently been declared carcinogenic and copper sulphate in hoof baths has largely been banned in Europe because it is harmful to the environment. If these products are used in a claw bath or mat, more than 90% ends up in the manure pit. Choose a product free of these hazard symbols and is safe for farmers, cows, the environment and manure digesters.



#### Proven in the field

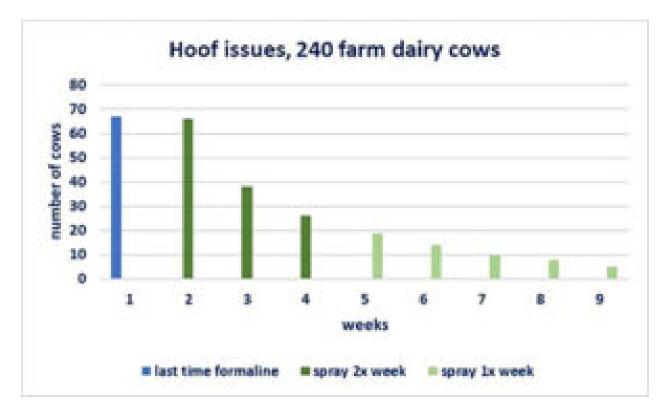
The growing attention for spraying methods by dairy farmers and manufacturers of miking robots already indicates that the method works well. This is confirmed by many reviews from dairy farmers, hoof trimmers, veterinarians and retailers who regularly visit the farm.

Research was carried out on two Dutch dairy farms with a total of 402 dairy cows and both were using formalin bathing in the past.



#### Figure 1 – Hoof issues reduced to 1%.

#### Figure 2 – Hoof issues reduced to 2%.



The main conclusion of this study was that <u>Intra Hoof-fit Spray</u> can replace formalin perfectly, as a very safe alternative. With a low frequency of use lameness can be controlled well below 5%.



When cows walk through a hoof bath or over a mat, the farmer often does not see the cows. Lame cows know when a painful bath with formalin or copper sulphate is prepared and will refuse or be the last to go through the contaminated bath. So those who need the support the most, get the worst bath condition. It has been proven that lame cows have fewer passages in the milking robot if the cows know that such a bath is included. By spraying, the whole dairy herd is treated the same.

# Less individual treatment by hoof trimmers or vets

Lameness, together with fertility and mastitis, is the biggest expense for every dairy farmer. Worldwide, an average of 20-25% of dairy cows have hoof problems. Reducing these hoof problems to only 5% of the dairy herd by consistently using protocol will greatly reduce the number of treatments required by hoof trimmers or veterinarians. This is a major extra cost saving for the farmer and a healthy hoof leads to a higher milk yield.