# Spraying the hooves of dairy cows puts all signs on green

Reeping the hooves of dairy cows in optimal condition all year round does not have to be an expensive or difficult task. It is important 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.

### by Marc Spackler MSc and Gerwen Lammers PhD, Intracare. www.intracare.nl

These 10 'signs' show that smart spraying is the future:

# 1. Always a fresh spot on every hoof

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.

# 2. Reduce the frequency by 4x

Traditional hoof bath protocols often prescribe a minimum treatment of two days per week after each milking, for example more than four times per week.



There are even mat protocols that require 24/7 routine.

With our spraying protocol, only one 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.

# **3.** Decrease the amount of product required by 5x

For a traditional 200 litre foot bath, 10 litres of product are often added and used to pass through 200 cows.

So 50ml per cow, which counts with a frequency of four times to 200ml per cow per week.

Spraying one time a week only requires around 25-40ml per cow.

# 4. Serious time saver

A hoof bath requests 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 four times a week.

Spraying in the milking parlour or at the feeding fence it 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 Intra Hoof-fit Spray requires no preparation time.

# 5. Economic benefits that count

Weekly bathing costs about €15-40 per cow per year when using questionable products such as formalin or copper sulphate.

For 24/7 hoof mat concepts, the annual *Continued on page 9* 

### Applying a spray product in milking robot or by backpack sprayer on every claw.







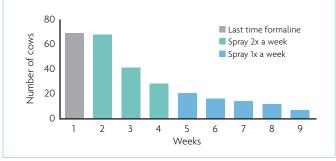


Fig 1. Hoof issues reduced to 1% in 162 farm dairy cows.

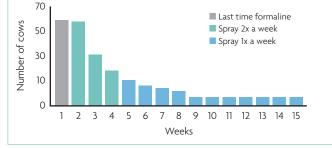


Fig 2. Hoof issues reduced to 2% in 240 farm dairy cows.

### Continued from page 7

costs even exceed  $\in$  80 per cow. A yearround spraying approach can be done for less than  $\in$  10 per cow, which offers every farmer considerable cost savings.

### 6. For the whole herd

Hoof baths and mats only reach the lactating cows.

Knowing that heifers from one 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 critical to not 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.

# 7. Safety first

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.

### 8. 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 has been confirmed by many reviews from dairy farmers, hoof trimmers, veterinarians and retailers who regularly visit the farm. A study was carried out on two Dutch dairy farms with a total of 402 dairy cows and both had used formalin bathing in the past.

The main conclusion of this study was that Intra Hoof-fit Spray can perfectly replace formalin, as a very safe alternative. With a low frequency of use lameness can be controlled to well below 5% (see Figs. 1 and 2, where the hoof issues dropped at both farms to 1% and 2% respectively).

### 9. Farmer's eye

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.

# **10. Less individual treatment by hoof trimmers or veterinarians**

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.

