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## ***Uptake and effectiveness of interventions to reduce claw lesions in 40 dairy herds in the UK***

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### **Abstract**

*In the final year of a three-year study of lameness in dairy cattle, 40 herds were allocated to either an intervention (22) or control (18) group. Farms in the intervention group were visited by a veterinarian who made up to 16 recommendations to reduce the incidence of lameness based on potential risks for lameness observed at that visit. Farms in the control group were visited and the same observations were made, but no changes recommended. All farms were visited on three further occasions to score the locomotion of all cows and collect information on changes made to the farm. Before intervention, the mean herd size, lactation average milk yield per cow and prevalence of severely lame cows were 122, 8,157 l and 9.85% for the control group and 109, 7,807 l and 9.14% for the intervention group. After the intervention there were no significant differences between the treatments in terms of the change in prevalence of severely lame cows or the change in rate of sole ulcer, white line disease or digital dermatitis. The overall uptake of recommendations was 41.3%. There were no significant correlations between the percentage of risks addressed and the rate of sole ulcer or prevalence of severely lame cows and only a non-significant trend for white line disease. Improvements to cubicle dimensions were associated with a reduction in the rate of sole ulcer, and changing nutrition and adding biotin to the ration were associated with a reduction in white line disease. Conversely, increasing the amount of sawdust to cubicle floors was associated with increased rate of sole ulcer and white line disease and improving cubicle dimensions was associated with increased rate of white line disease.*

**Keywords:** *animal welfare, claw disease, dairy cattle, implementation, intervention study, lameness*