

Research Summaries II

“Dairy and General”

Moderator - Don Hansen, DVM

Case-Control Study of Papillomatous Digital Dermatitis in Southern California Dairies

A. Rodriguez, D. W. Hird, T. E. Carpenter, D. H. Read

*University of California, Davis
School of Veterinary Medicine
Davis, CA 95616*

In order to describe papillomatous digital dermatitis (PDD), and to determine risk factors for highly affected dairies, data from 37 southern California dairies with >5% of cows affected (highly affected dairies, cases) were compared with those from 20 dairies with ≤5% of cows affected (controls). Information on dairy environment, management and PDD occurrence was obtained from dairy managers, veterinarians and hooftrimmers, and by direct measurement. Odds of having a higher proportion (>5%) of cows affected were

19 times greater in dairies with muddy corrals than in drier dairies. Buying replacement heifers was associated with a 4.7-fold increase in the odds of higher PDD occurrence, compared to dairies that did not buy heifers. Spatial analysis, used to examine distribution patterns of the study dairies, showed no evidence of clustering among case or control dairies, and there was no association between case dairies and proximity to the major local river. These risk factors may be amenable to manipulation for disease control.

Impact of Preventive Hoof Care on Dairy Heifer Performance

P.B. Scharko

*University of Kentucky, College of Agriculture, Veterinary Science Department
Livestock Disease Diagnostic Center
1429 Newtown Pike
Lexington, KY 40511*

T.J. Davidson

*Department of Health Management
Atlantic Veterinary College, University of Prince Edward Island
550 University Avenue
Charlottetown, PEI C1A 4P3 CANADA*

Northern climate can place many restrictions on how to raise heifers and these restrictions can have an important effect on hoof growth. Heifers in northern climates are raised indoors during the winter months. They are either grouped with other heifers of similar size in pens or they are placed in tie-stalls. The latter method does not permit much free movement. The tie-stall is usually constructed of concrete with straw for bedding or rubber pads. Wet concrete in the tie-stalls

or moist manure pack in pens can soften the hoof wall and, coupled with reduced exercise, promote a longer toe due to less wear on the hoof wall. Most producers do not routinely trim their animals' hooves until after they have calved. When vaccinating and deworming heifers, one can often notice that they have long toes. Corrective trimming at an early age could allow a more normal claw, promoting more normal growth and wear while on pasture.