Veterinary herd health management in Swiss dairy herds with a subclinical udder health problem

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Key words

Dairy cow, Mastitis, udder health, Somatic cell count, Switzerland

Aim of the study

The objectives of this study were to (i) describe the udder health management in Swiss dairy herds with udder health problems, (ii) to calculate the costs of a routine veterinary udder health support program, and (iii) to calculate the nation-wide costs associated with udder health problems in Switzerland.

Material and methods

One hundred dairy herds with a yield-corrected somatic cell count of 200'000 to 300'000 cells/ml during 2010 were selected. Data concerning farm structure, housing system, milking technique, milking procedures, dry-cow and mastitis management were collected during farm visits between September and December 2011. In 49 farms, yearly mastitis associated costs before and during intervention were collected at herd level. Costs were calculated for each lactating cow being present in the herd. At the beginning of the intervention, 24 farms received a report with recommendations to improve the udder health. In the following year, those herds were followed-up by their veterinarian at a monthly basis. The other 25 farms received neither recommendations nor any follow-up, and they were used as a negative control group.

Results and significance

Eighty-two percent of the pipeline milking machines in tie-stalls and 88 % of the milking parlours fulfilled the criteria for the vacuum drop, and only 74 % of the pipeline milking machines met the criteria of the 10-l-water test. Eighty-five percent of the farms changed their milk liners too late. The correct order of teat preparation before cluster attachment was carried out by 37 % of the farmers only. With these results in mind, Swiss dairy farmers and herd health veterinarians can be directed to common mistakes in mastitis management. In the first year of analysis (2010), the median udder health costs were 209 Swiss Francs for each lactating cow, regardless of the intervention group. During the intervention period (2012), mastitis associated costs were 191 Swiss Francs for control farms and 396 Swiss Francs for farms with intervention. The additional costs for herds with intervention were 159 Swiss Francs (median) per lactating cow. At the national level, mastitis associated costs were estimated at 129.4 millions of Swiss Francs per year. The economic viability of future mastitis programs can be evaluated with the help of the calculation model developed for this study.

Publications, posters and presentations

Kretzschmar, L (2013) Mastitis-Management in Schweizer Milchviehbetrieben mit Eutergesundheitsproblemen. Veterinär-Medizinische Dissertation, Vetsuisse-Faculty, University of Bern.

- Kretzschmar, L; B. H. P. van den Borne; T. Kaufmann, M. Reist; D. Strabel; M. Harisberger; A. Steiner; M. Bodmer (2013) Mastitis management in Swiss dairy farms with udder health problems. Schweizer Archiv für Tierheilkunde 155: 453-462.
- D. Heiniger, B.H.P. van den Borne, I. Lechner, A. Tschopp, D. Strabel, A. Steiner, HJ. Meier. Kosten-Nutzen-Analyse einer Intervention zur Verbesserung der Eutergesundheit in Schweizer Milchviehbetrieben. Schweizer Archiv für Tierheilkunde; zur Publikation vorgelegt.

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