Udder health in organic dairy herds in Northern Germany

V. K. Hansmann[1], O. Volling[2], V. Krömker[1]

[1] Department of Bioprocess Engineering, Microbiology, University of Applied Sciences and Arts Hannover, Heisterbergallee 10a, 30453 Hannover, Germany
[2] Ökoring e. V., Bahnhofstraße 15, 27374 Visselhövede, Germany

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Abstract

The aim of this prevalence study was to describe the udder health situation at herd level of organic dairy herds in Northern Germany. Data from 21 voluntarily participating organic dairy herds (12-290 cows) were collected between 2011 and 2016, including somatic cell counts (SCC) from the dairy herd improvement test (DHI-test). Based on key figures from the DHI-test, the subclinical udder health status of each herd was described. Additionally, the incidence of clinical mastitis as well as the treatment of clinical mastitis cases and at drying off were obtained directly from farm records from questionnaires.

On average, 45% of the cows in a herd were classified to be udder healthy during the study period. The average monthly new intramammary infection rate was 34% in the dry period and 27% during lactation at herd level. Half of the cows which had shown an elevated SCC (>100,000 cells/mL milk) at the last record before drying off were cured by the first DHI-test day after calving. For drying off, farm managers most commonly used internal teat sealants (44%), followed by antibiotic (22%) and homeopathic (5%) dry cow therapy wherein a combined treatment was possible. The average subclinical heifer mastitis rate was 36% at first record after calving. Additionally, 1.6% of the lactating cows had an incurable udder infection. The incidence of total clinical mastitis was 37 cases in 100 cow years under risk.

The determined results were compared with those of conventional dairy herds published by other authors. Thus, this descriptive study demonstrated that the udder health in organic dairy herds is mainly comparable or tends to be worse than in conventional dairy herds, depending on individual parameters. In particular, the new infection rate during the dry period, the clinical mastitis rate as well as the heifer mastitis rate need to be improved.

Keywords: prevalence, monitoring, mastitis, mastitis treatment, drying off, herd health