FKZ 2814HS006-008: Animal health, hygiene and biosecurity in German dairy cow operations – a prevalence study (PraeRi)

Abstract

In the context of a research project entitled "Animal health, hygiene and biosecurity in German dairy cow operations – a prevalence study (PraeRi)" funded by the Federal Ministry for Nutrition and Agriculture (BMEL) under the administration of the Federal Office for Agriculture and Nutrition (BLE), a cross-sectional study was performed with the aim of a representative description of animal health, husbandry, hygiene, feeding and biosecurity in dairy cows, young stock and calves under the current situation in German dairy cow operations. Overall, 765 dairy farms in three regions with intensive dairying (North: n=253; East: n=252; South: n=260) in 7 federal states in Germany were visited. Data collection was performed during a structured interview with the farmer and a farm inspection. In addition, cows, young stock and calves were examined. Furthermore, silages currently fed were sampled and analysed, cow rations were calculated, dairy herd improvement (DHI) data were analysed and bulk milk tank samples were examined for antibodies against parasites. The incidence of common diseases in dairy cows was obtained from the farmers, and were on the average in the single-digit range, expect for inflammation of the uterus, mastitis and lameness which were in the lower double-digit range. However, the data basis was not very reliable, because it was often based on estimation by the farmer. Compared with own examinations and analyses, the frequency of disease was quite often underestimated by the farmers (e.g. lameness, metabolic disorders). The average replacement and mortality rate in the cows were about 35% and 3%, respectively. Perinatal mortality and rearing losses in female calves until the age of 84 days averaged about 5% each. As expected, a high variation among farms with respect to the numerous examined potential risk factors in the different areas was found. Regional differences were identified which on the one hand were indeed region specific (e.g. pasturing), but on the other hand were due to farm size effects. Overall, there were many dairy farms with a good management, but unfortunately, there was also a substantial number of dairy farms which did not comply with good agricultural practice. Furthermore, a basic understanding of biosecurity was guite often not present and the documentation either not satisfactory or not used systematically. Here, there is need for action and improvements. Based on the results of this study, options for action were proposesd for professional groups dealing with dairy cow operations and politics.