

Epidemiology of mastitis in 30 wallon dairy farms using a compilation of clinical and subclinical data in a new tool for Udder health assessment.

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Bovine mastitis has been assessed through somatic cells or clinical cases by farmers and vets but most of the time the perfect combination of both data remains unavailable. We tried to implement a new strategy of identification of mastitis-related costs, epidemiological impact and key periods of management.

We built an online system for clinical data capture, including facilities for administrative management of veterinary drugs. Herd prevalence rate (HPR) is assessed through clinical and subclinical data. Lactation incidence rate (NIR) and cure rate (CR) were calculated for the period (depending on type of DHI control) using subclinical thresholds (primiparous > 150.000 cells/ml and multiparous >250.000 cells/ml) and clinical cases in susceptible animals (healthy or diseased). Dry-off period is studied through the Dry-off cure rate (DOCR) and new infection rate at first control (NIFC).

The average number of cow-day-at-risk was 73.6 (StD=34.80). Mean HPR was 33 % (StD =11%); the average NIR was 16% and CR 35%. Mean DOCR was 62% with an NIFC of 23%.

Regarding a mean loss for mastitis of 71€ per cow-year, the average difference was +40.7€ (StD=66.7€). It is explained partly by DOCR ($R^2=0.20$; $\beta=-131$; $p<0.0001$). NIR is mainly influenced by HPR, but mainly by primiparous infection rate ($R^2=0.36$; $\beta= 0.33$; $p<0.0001$).

Those figures are coherent with subclinical data indicating that multiparous cows are becoming more and more infected, limiting efficacy of dry-off therapy. Communication has to be done around dry-off and preventive measures in primiparous cows. As CR had few significant impact on global udder health, cure at the herd level should more be regarded as cow ability to cure in its environment than by considerations on medication once infected.