

An Intervention Tool to Improve Health and Welfare of Replacement Heifers in Canadian Dairy Farms

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The comfort and care of dairy calves is sometimes overlooked on dairy farms. There is a need for a diagnostic tool and planned intervention at the farm level to identify problems with calf-rearing practices and help producers improve the management of calves and heifers in order to ensure the health and well-being of the replacement herd.

As a first step, we conducted an animal-care risk factor assessment via an epidemiological survey on 115 representative dairy farms in Quebec. We found nine areas of concern in management practices: calving management, newborn calf care, colostrum management, calf feeding, weaning, calf housing, heifer feeding, heifer housing, and health. We also interviewed producers on their perceptions and attitudes regarding calf and heifer rearing management. We found some points that explained producers' low interest in rearing management and calf welfare: 50% of producers underestimated rearing costs by 20%, producers underestimated calf mortality by 20–50%, and almost all producers perceived that calf mortality was not a problem. With the areas in need of intervention identified, we then worked with a group of specialists to establish goals to be recommended for each area of concern, and we assembled material to explain those goals. The goals were chosen with a view to encouraging good practices that will ensure the sustainability of dairy farms as well as the comfort and well-being of replacement animals.

Our intervention tool was tested on 28 Quebec dairy farms for feasibility, producer satisfaction and repeatability between two observers (reliability). Farmers were asked to take calf blood and colostrum samples and to record health events. The on-farm evaluation included an interview on management practices and in-barn measurements. Scores and recommendations were discussed with producers. The efficiency and usefulness of our tool was also evaluated by the producers themselves during a final debriefing.

Implications: This intervention tool can be successfully used as a diagnostic tool to identify areas of calf and heifer management in need of improvement and as an advisory tool for future application by technical advisors and veterinarians.