

Identifying Management and Disease Priorities of Canadian Dairy Industry Stakeholders

C.A. Bauman¹, H.W. Barkema², J. Duboc³, G.P. Keefe⁴, and D.F. Kelton¹

¹Department of Population Medicine, University of Guelph, Guelph, ON; ²Department of Production Animal Health, University of Calgary, Calgary, AB; ³Faculté de Médecine Vétérinaire, Université de Montréal, St-Hyacinthe, QC; ⁴Department of Health Management, University of Prince Edward Island, Charlottetown, PEI

Why is this important?

A “priorities assessment” is a systematic approach of determining priorities surveying people who work in, or are served by, a particular industry. It is important for all stakeholders to understand the needs of the industry in order to focus research, program, and policy efforts on continual improvement.

The National Animal Health Monitoring System (NAHMS) dairy priorities assessments in the United States are undertaken every 5-7 years and provide great insight to dairy research funding and extension initiatives.

A similar survey has never been done in Canada and it is likely that priorities here may differ from the U.S. due to our supply management system and climate. Therefore, the objective of this study was to identify the key management and disease issues affecting the Canadian dairy industry.

What did we do?

An online questionnaire was created to address the study objective. Dairy stakeholders recruited for the survey included five main categories: dairy producers, veterinarians, university researchers, government personnel, and other (nutritionists, allied organizations, and consultants). The survey was structured in three parts: 1) demographics, 2) identification of priority management issues, and 3) identification of priority diseases, disorders, or pathogens.

The content was developed by dairy researchers from four veterinary / agricultural universities across Canada and previous NAHMS study priorities assessments were used as a guide during development. A total of 1,025 responses were received, including 698 from dairy producers.

Table 1. Top management priorities of dairy producers in the Canadian dairy industry.

Management Issue	Producers	Veterinarians	Universities	Government	Other
Animal welfare	1	1	1	1	1
Reproductive health	2	5	11	3	10
Costs of disease	3	5	5	18	5
Cow deaths / longevity	4	11	7	7	4
Udder health	5	3	8	22	9
Feed costs	6	16	19	9	12
Lameness	7	8	4	12	2
Nutrition	8	13	12	8	6
Biosecurity	9	4	3	4	3
Raw milk	10	15	NR	18	15
Food safety	11	11	9	5	6
Antimicrobial use	18	2	2	2	6

^a NR – not ranked, because no one in this occupation selected this topic to be a priority.

Table 2. Top 5 management issues prioritized by dairy producers in the Canadian dairy industry categorized by region.

Region	First priority	Second priority	Third priority	Fourth priority	Fifth priority
Western provinces	Animal welfare	Reproductive health	Lameness	Udder health	Feed costs
Ontario	Animal welfare	Herd expansion	Lameness	Feed costs	Reproductive health
Quebec	Animal welfare	Reproductive health	Nutrition	Lameness	Cow deaths / longevity
Eastern provinces	Animal welfare	Feed costs / udder health	Reproductive health	Biosecurity	Food safety

¹ Western provinces: British Columbia, Alberta, Saskatchewan, Manitoba

² Eastern provinces: New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland

What did we find?

All five stakeholder groups identified animal welfare as the top priority management issue. Other management priorities differed based on the group (Table 1). There were some noteworthy differences in management priorities between geographic regions (Table 2). All five stakeholder groups identified lameness as the top priority disease topic. The order of other top priorities varied between groups, but all agreed that *S. aureus*, calf diarrhea, respiratory disease, and Johne's disease were top priorities (Table 3).

Table 3. Top 10 disease topics prioritized by dairy producers in the Canadian dairy industry.

Disease Issue	Producers	Veterinarians	Universities	Government	Other
Lameness	1	1	1	1	1
<i>Staphylococcus aureus</i> mastitis	2	2	5	7	4
Calf diarrhea	3	4	3	4	2
Abortions	4	14	10	14	9
Respiratory disease	5	6	11	8	8
Bovine leukosis virus	6	5	7	4	6
Johne's disease	7	3	2	3	3
Multidrug-resistant <i>S. aureus</i>	8	12	6	18	19
Bovine viral diarrhea	9	11	4	6	5
<i>Escherichia coli</i>	10	8	7	2	7

Stay tuned...

The results from this study were used to inform the National Dairy Study (NDS), which was a survey designed to gather dairy cattle health and management data from dairy farms across all provinces. Targeted data included information about herd demographics, biosecurity, animal care, lameness, calf health and management, reproductive management, and udder health. Results from the NDS will be featured in upcoming DRECA conversations.

Summary

- The top management priority identified by all stakeholders was animal welfare and the top health issue was lameness.
- This priorities assessment provides the evidence needed by researchers, program developers, and policy makers to maximize the effective and efficient use of funding and resources.