Intra-farm communication about calf health: who's talking?

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Introduction

Effective communication within an organization is essential for accomplishing tasks and for job performance and satisfaction. The dairy business is not an exception to this rule, especially as it applies to animal health and the many people responsible for animal care. Because dairy veterinarians work with the consolidating US dairy industry, their understanding of the many layers of management on these larger farms and the communication realities within them are critical to effective implementation of health-care decisions. Of particular concern are drug-use decisions at the calf level.

Materials and Methods

Fifty-two dairies located in Arizona, Idaho, New York, Oregon, and Washington were enrolled in this study by their veterinarians. Calf herd size was estimated on the basis of the number of pre-weaned calves on the premise and was categorized into 1 of 4 categories $(1-49, 50-99, 100-349, and \ge 350 \text{ calves})$.

A trained team of investigators interviewed 224 people associated with participating dairies including the owner, veterinarian, herd manager, herdsman, calf manager, calf feeder, calf treater, and others. This was a standardized, multilayer interview process that used an interview tool consisting of four themes, the third of which focused on calf health goals, disease prevention practices, antimicrobial use, and identification and treatment of neonatal calf disease. Interviews included questions such as: 1) What are the current practices or protocols being employed on the farm (to elucidate the level of agreement on disease prevention and treatment practices)?; 2) How does information about calf management and treatment reach the person responsible for disease detection, mitigation, and therapy?; 3) What kinds of education and training programs are provided to and participated in by individuals at the different levels of management on the farm?; and 4) How would individuals empowered with calf treatment best learn new information and protocols to enable understanding and use?

Data were entered into an online survey tool, exported to a spreadsheet and analyzed with descriptive statistics. Responses to open-ended questions were iden-

tified for themes and theme-coded independently by 3 of the investigators. A consensus set of theme categories were developed by the investigative team as a whole. Responses across all farms, within job titles, and within farms were evaluated for agreement.

Results

Of the 52 farms enrolled in this study, 3 were located in Arizona, 3 in Idaho, 23 in New York, 2 in Oregon, and 21 in Washington. Calf herd size categories of 1-49, 50-99, 100-349, and \geq 350 calves were represented by 27%, 25%, 25%, and 23% of participating dairies, respectively. Two hundred twenty-four people were interviewed including owners (24%), veterinarians (22%), herd managers (8%), herdsmen (4%), calf managers (13%), calf feeders (17%), calf treaters (8%), and others (3%).

Goal themes varied by job title when participants were asked to identify the two most important goals for calf health. Within-farm consensus on process and outcome goal themes ranged from 0 to 80% agreement. Few goals provided were actually measurable. Sixty percent of respondents indicated their farms had written protocols for managing calf health; however, within-farm agreement ranged from 50 to 100%. Eighty-three percent of owners indicated they discussed calf health concerns with their veterinarian while 30% and 6% of calf managers and calf treaters, respectively, reported the same.

Themes from all respondents regarding the last calf health problem encountered included none or blank (25%), increased mortality (9%), salmonellosis (7%), respiratory disease (13%), bloat (4%), pinkeye (1%), umbilical infections (1%), diarrhea (30%), or other (10%). Responses varied by job title and within farm. Most calf health problems occurred during the previous 12 months and were first identified by the calf manager or feeder; however, there were intra-farm discrepancies as to who was first to identify the problem.

Veterinarians and owners were notified of the problem, with the veterinarian reported to be the person most likely to decide on necessary changes and the calf manager identified as the person most likely to insure the changes were implemented. Sixty-three percent of the respondents indicated that the change became a permanent practice, and 34% of respondents indicated the veterinarian was notified the problem was solved.

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Significance

Not all persons on the dairy calf-care team agree on goals and procedures or remember the same problems. These differences could be partially attributed to ineffective communication along the chain of command. Veterinarians are expected to assist in calf-health and drug-use decisions. To assure implementation, veterinarians should understand the lines of communication within the calf-care team and what individuals know and understand about their farm goals and protocols.