Pilot Program: Bilingual Training for Care and Management of Dairy Calves

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Hugo Ramirez, Jenn Bentley, and Ryan Breuer, Iowa State University Extension and Outreach Dairy Specialists; Kimberly Clark, Paul J. Kononoff, University of Nebraska

Summary and Implications

This educational pilot program is being implemented to provide training and education about care and management of dairy calves in English and Spanish. The language barrier among dairy owners, managers and employees limits the transfer of knowledge and training; this program seeks to bridge the gap and educate a sector of the dairy workforce to successfully raise dairy replacements. This is a collaborative effort between dairy extension specialists from Iowa State University and the University of Nebraska. Two dairy farms in Iowa and one in Nebraska served as pilot sites for a workshop addressing management practices and educating Hispanic dairy employees on topics such as importance of colostrum and its quality, proper use of esophageal feeders, and animal handling. Through these workshops, it was found that most employees had little to no experience handling calves prior to their current employment. In addition, many employees had limited training on proper procedures including hygiene protocols, colostrum quality assessment and animal handling. Long term goals of this program include an on-line repository of educational and training material available in English and Spanish.

Introduction

Calves represent the future of any dairy farm because they will become the next generation of lactating cows. Successful calf rearing programs include specific management practices in areas such as housing, feeding and nutrition, vaccination, and handling and transportation. Having properly trained employees is critical for the health, growth and development of dairy calves and for the profitability and sustainability of the dairy farm. Results from a 2016 Nebraska dairy producer survey indicated that 61% of respondents want hands-on employee educational materials for calf care and handling in both English and Spanish. Similar responses have been expressed by dairy producers in Iowa.

In order to benefit the progress of the dairy industry, Iowa State University and the University of Nebraska had joined efforts to develop training modules for dairy calf care and management.

Programmatic Response

Based on information received from dairy producers, the Extension team of both institutions developed written factsheets with educational information on the following topics:

- Newborn care and management
- Colostrum management
- Calf handling and transportation
- Feeding and nutrition of dairy calves
- Management of automatic feeders
- Hygiene evaluation in the "calf kitchen"

These topics were the base material for educational workshops conducted on site. In addition, there were practical demonstration and training on the use of common instruments utilized for colostrum quality assessment and evaluation of hygiene practices.



Figure 1. Dairy employees using a refractometer to evaluate colostrum quality.

Result and Discussion

The pilot project reached a total of 11 Spanish-speaking employees in Iowa and Nebraska who care for approximately 1,500 calves annually. Employees were provided with hands-on education and materials in Spanish for animal handling, hygiene, colostrum management, calf nutrition and newborn calf care The workshops included demonstration and training to evaluate colostrum using a colostrometer and 3 types of refractometers while hygiene evaluation was done using a protein residue swab and also a luminometer. A follow-up survey of the pilot project indicated all the employees learned something new and will make changes that include providing better hygiene of bottles, provide water to all calves, and feed colostrum sooner. Each dairy farm owner or manager indicated the training and education has been beneficial for their employees in understanding their job responsibilities as well as improved calf health and care. Additionally, owners/managers indicated that standard operating procedures were updated based on what they learned. When participants were asked about their preference for delivery of training and educational material (factsheets, sporadic training, audio file [podcast], or video), nearly all employees and owners indicated that it would be beneficial to have this information in video format for use with new employee onboarding and monthly training sessions.

Dairy producers and employees expressed satisfaction with the training program, specific evaluations were as follows:

Learned something new

54.5% - very satisfied, 45.5%-satisfied

Clarified things that routinely do but did not know why

54.5% - very satisfied, 36.5% - satisfied, 9% - neutral

Information will help me do a better job

72.7% - very satisfied, 27.3% - satisfied

Will try something new based on material learned

54.5% - very satisfied, 45.5% - satisfied

Desire to have more sessions like this

63.7% - very satisfied, 27.3% - satisfied, 9% - neutral

Outcomes

With the deployment of the pilot project as a basis, both Extension teams worked collaboratively to submit a grant application for the Extension Risk Management Education Program from the North Central Risk Management Education Center and the USDA National Institute of Food and Agriculture. If funded, educational material will be created in video and disseminated to stakeholders in both states through Extension and Outreach.