feedlot than using either measure alone. To our knowledge, this was the first study to use a combined case definition to estimate the overall effect of BRD on growth in feedlot calves and the first report of the impact of BRD in South African feedlots.

Feedyard Managers and Veterinarian Response to a Delphi Feedyard Biosecurity Survey

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Introduction

Biosecurity is an important aspect of disease prevention in any agricultural production system. The beef feedyard is particularly vulnerable to disease introduction because of the large number of different cattle arriving from multiple sources. Additionally, the large concentration of animals makes a feedyard a likely target for bioterrorism from domestic or international terrorist groups. The economic losses that accompany the treatment or elimination of an infectious or toxic agent to a feedyard would be substantial. The purpose of this survey was to determine the importance of different aspects of biosecurity in feedyards utilizing a Delphi survey.

Materials and Methods

A Delphi survey series was submitted to feedyard veterinarians and the feedyard managers of midwestern feedyards to assess knowledge and opinion regarding biosecurity risks and practices. All feedyard managers included in the survey were chosen by recommendations from academic and consulting feedyard veterinarians. Managers from 17 feedyards were selected for participation. Based on recommendations by academic veterinarians associated with the beef industry, 13 veterinarians in consulting practice, academia and industry were selected for the survey. Feedyard managers and veterinarians were given the same survey with the addition of two questions in the veterinary survey. Veterinarians were additionally asked about security measures and risks from domestic and international terrorist groups. They were also provided one fill-in-the-blank question for other suggestions.

The Delphi survey was repeated three times with each feedyard manager and veterinarian. Following each survey, results were compiled for the each group separately (feedyard managers and veterinarians). Median answers were determined for each question and the surveys were submitted again with the same questions including the median from the first survey. This process was repeated a second time using the median scores from the second survey answers in the third survey. Final median results were summarized for each question and each group for comparison.

Results

Results show that consulting veterinarians and feedyard managers have very similar views on the likelihood of disease caused by terrorism, natural introduction or accidental introduction, and on the importance of on-site security. They did, however, disagree on the importance of preventative products, environmental control and disease transmission control. The most significant difference between veterinarians and feedyard managers was found in the area of environmental control. In general, the veterinarians believed that environmental control was less important than the feedyard managers did.

Significance

A Delphi survey seeks to find the consensus opinion among anonymous contributors while allowing them to see what answers the others gave. It is a useful tool

for eliciting expert opinion in areas where hard data are lacking. The anonymous method allows participants to express their views without any one individual dominating the group. This study is significant because hard data are not available on what practices are most related to risk for beef feedyards. Differences in awareness of these issues is significant because veterinarians are pivotal in educating the feedyard staff about the prevention of disease entry and spread. They further provide information on the views of each group that are useful in arriving at effective biosecurity programs.

Feedyard managers are not always cognizant of the various risks or their relative importance and need expertise from feedyard consulting veterinarians in the area of biosecurity. This Delphi survey series has identified environmental control of disease, disease transmission control and preventative products as particular areas where perception of risk and effectiveness of mitigation strategies differs between feedyard managers and feedyard consulting veterinarians. Veterinarians should be experts on disease risks and transmission in the feedyard, and their knowledge is an important source of information for feedyard biosecurity. Veterinarians can provide training to managers and feedyard employees on biosecurity practices and the development of effective and economic biosecurity plans.

Hard data are lacking on real risks and the effectiveness of mitigation strategies. Objective data on real versus perceived risk are difficult to obtain for terrorist disease introduction risks. Objective data on natural or accidental disease introduction risk and impact are more available, but still incomplete. Further data from experimental studies and disease modeling would be helpful to further characterize these risks and impacts. These results are helpful in further understanding risk perception in the feedyard from those who likely know it best. Knowledge of risks and mitigation strategies will assist in risk assessment and the development of economic and effective biosecurity plans for feedyards.

The Association between Hoof Lesions and Milk Production in Ontario Dairy Cows

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Introduction

To preserve and improve the perception of the dairy industry among consumers, there is a need to identify and act upon animal welfare concerns. Lameness is the dairy industry's most visible animal welfare concern. Unfortunately, dairy producers and practitioners often underestimate the level and impact of lameness and hoof lesions on their farm. The impact of lameness and hoof lesions on milk production in North America has not been widely evaluated across a wide number of herds. The objective of this project was to determine the association between infectious and non-infectious hoof lesions and 305-day milk production in dairy cows.

Materials and Methods

A convenience sample of five hoof trimmers were trained and asked to record lesions on a standardized form for all cows they trimmed in a herd. The standardized recording form was based on the lesions descriptions and codes proposed by the Lameness Committee of the American Association of Bovine Practitioners. Individual cow lesion data from 7300 cows in 173 herds were merged with dairy herd improvement (DHI) production data. To determine the association between individual lesions and milk production, the cow's projected and actual 305-day milk production were used as outcome variables in a linear mixed model. All models in-