

Perception of lameness management, education, and animal welfare implications in the feedlot from consulting nutritionists, veterinarians, and feedlot managers

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Introduction

Increased production costs associated with an increase in the cost of feedstuffs has made animal health and production efficiency an ever more essential part of the feedlot beef industry. Compared with other feedlot health concerns, lameness has not been widely investigated but has been reported to account for 16% of all feedlot health problems. Costs associated with lame feedlot cattle include the cost of treatment, death loss, and loss due to chronic animals or realizer sale. Lameness, specifically footrot, is a cause of poor performance in feedlot cattle. The potential impact of lameness on cattle comfort and overall welfare, along with health and performance, warrants research to better understand the causes and pathogenesis of lameness.

Materials and Methods

Consulting nutritionists (CN; n=37), consulting veterinarians (CV; n=47), and feedlot managers (YM; n=63) from the United States and Canada participated in a feedlot cattle lameness survey. The survey consisted of 24 questions that covered general information (n=3), feedlot health and lameness (n=5); diagnosis, treatment and causes of feedlot lameness (n=6); contributing factors of lameness (n=2); education and recommendations (n=6); and the economics of feedlot lameness (n=2).

Results

The majority (98.4%) of participants either managed or consulted on open-air, dirt-floor feedyard facilities. Participants estimated that the median incidence

of lameness in feedlots was 2% (mode, 1%), and 41% of participants believed that $\geq 50\%$ of lame cattle required treatment. Although 81% of participants estimated that lameness contributed to $< 10\%$ of feedlot deaths, 46% of participants estimated that lameness contributed to $\geq 10\%$ of chronic or realized losses. The most common cause of lameness was identified as footrot by 42.2% of participants and injury by 35.4% of participants. The most frequently cited contributing factors for infectious lameness in feedlot cattle were pen conditions (85.0% of participants), pen surface (56.5% of participants), and weather patterns (45.6% of participants). The most frequently cited contributing factors for non-infectious lameness in feedlot cattle were cattle handling after arrival (67.3% of participants), cattle temperament (65.3% of participants), and cattle handling before arrival (63.9% of participants). Of the 63 participating feedlot managers, 61 (96.8%), 45 (71.4%), and 13 (20.6%) received information about lameness prevention from a veterinarian, nutritionist, or training seminar, respectively. Lameness was considered a welfare concern by 58% of participants, a growing concern by 20% of participants, and not a welfare concern by 22% of participants.

Significance

To our knowledge this was the first survey of feedlot industry professionals, including consulting veterinarians, consulting nutritionists, and feedyard managers, conducted to identify management causes of lameness, common treatment practices for lameness, and diagnostic philosophies for lameness, and to pinpoint areas of focus for future research and education.