

Determining frequency of mortality by cause and association with days of age categories in a calf ranch

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Introduction

With the increase of beef-dairy calves, limited work has been done evaluating causes of mortality in commercial calf ranches. The objectives were to report the frequency of gross mortality diagnosis by necropsy at commercial calf ranches and to determine association of days of age (DOA) with mortality.

Materials and methods

Full systematic necropsies (n = 211) were performed in southwest Kansas at 2 different calf ranches by field technicians with confirmation of all diagnoses by a veterinarian. Mortality diagnoses were categorized as gastrointestinal (GI), respiratory, septicemia, or other based on gross diagnosis. A subset of calves had DOA data (n = 145) and DOA was categorized as (1 to 29, 30 to 59, 60 to 89, and greater than 90 days). A generalized linear model was used to evaluate the probability of finding respiratory or GI diagnoses based on breed, sex and DOA categories.

Results

Gross necropsy revealed 71.1% (150/211) of all mortalities were categorized as respiratory, 18.5% (39/211) as GI, 7.1% (15/211) as septicemia, and 3.3% (7/211) as other. Breed and sex were not associated with probability of respiratory or GI diagnosis. Calves greater than 60 DOA were at greater risk ($P < 0.05$) for respiratory diagnoses than calves less than 59 DOA. In contrast, probability of GI diagnosis was greater ($P < 0.05$) for calves less than 30 DOA than other DOA categories.

Significance

Mortalities of dairy and dairy-cross calves by gross necropsy were most commonly categorized as respiratory and the likelihood of respiratory or GI diagnosis was associated with DOA category. This data adds information about mortalities in commercial calf ranches.

