Health care metrics and health care policies during the preweaned period on calf ranches

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Introduction

Health care metrics of morbidity and mortality as well as health care policies related to antimicrobial use and biosecurity and biocontainment provide a means to evaluate operations rearing preweaned dairy calves. In general, studies of the aforementioned health care parameters for calf ranches are rare, compared with those for US dairy operations. The aim of this study was to characterize calf ranches with respect to health care metrics and health care policies during the preweaning period, and where possible, compare our findings with reports from dairy operations.

Materials and Methods

A convenience sample of 212 eligible calf ranches was selected and 105 responded. Fifty-four questions pertaining to basic demographics, disease-specific morbidity and mortality, as well as policies for antimicrobial use and biosecurity and biocontainment were administered to respondents through a mail-based survey with telephone follow-up. Health data were summarized at the herd level and calf level for operations rearing solely heifer calves and both heifer and bull calves during the preweaning period.

Result

Of the calf ranches responding, the number of preweaned calves reared yearly ranged from 14 to 100,000. A median of 3.6% calves died, with half of all deaths attributed to diarrhea. A median of 20% and 5% calves experienced diarrhea and respiratory disease, respectively. The majority of calves with diarrhea and respiratory disease received an antimicrobial. Over half of calf ranches had written guidelines for antimicrobial use and collected information regarding antimicrobial use for individual calves. Calf ranches rearing heifer calves and those rearing heifer and bull calves during the preweaning period had many similar health metrics. With respect to biosecurity and biocontainment, a majority of calf ranches fed calves from youngest to oldest and used separate feeding equipment for sick calves. In general, our findings suggested calf ranches were comparable, and occasionally superior, to dairy operations with respect to reported health metrics.

Significance

This study characterizes a sample of calf ranches with respect to health metrics and herd-level health care policies. With respect to health care of replacements during the preweaning period, our data suggest calf ranches provide an experience similar to dairy operations. A bovine practitioner wishing to benchmark a calf ranch or a dairy operation client who is considering using a calf ranch in a replacement-rearing program can utilize this data in his or her efforts.