Summer Pneumonia in Preweaned Calves

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Introduction:

Pre-weaned calves pastured at high altitude during the summer months in the Rocky Mountain States experience high mortality rates, attributed to a problem called ‘summer pneumonia’. Herd records from ranches in Gunnison, Colorado show that 10-25% mortality is common in these calves, compared with 5-6% rates in similar age calves in national surveys of the cow-calf industry.

The cattle health problem known as ‘High Mountain Disease’ (HMD), or ‘Brisket Disease’ has been historically important for these high mountain ranches. Previous research showed this problem was caused by a genetic predisposition to pulmonary hypertension and right-sided heart failure in certain cattle exposed to hypoxic conditions. For several decades ranchers have used animal testing and management to successfully decrease the occurrence of this problem. Calf losses to summer pneumonia have been previously ascribed to HMD because one of the potential outcomes, right-sided heart failure, and some clinical signs are similar.

Current Research Endeavors:

1. Evaluate inflammatory responses, organ system functions or damage, and pulmonary vascular responses as components of the disease process that results in summer pneumonia of preweaned beef calves pastured at high altitudes.

2. Determine the geographic distribution and risk factors for summer pneumonia through epidemiological surveillance of the Rocky Mountain region.

Publications:

High Mountain Disease in Cattle, Joseph Neary, MA, VET MB
CSU Veterinary Extension