

Moraxella bovis and *Branhamella ovis* and the Occurrence of Pinkeye in Beef Calves

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Introduction

This study examined the association between *Moraxella bovis* (*M. bovis*) and *Branhamella ovis* (*B. ovis*) and pinkeye in beef calves.

Materials and Methods

The eyes of calves with active pinkeye lesions were graded and swabbed prior to treatment. The severity of the active lesion was graded as none, mild, moderate and severe. At the same time, eye swabs were collected from one to three unaffected pasture mates. Swabs were submitted to the Iowa State University Veterinary Diagnostic Laboratory for culture within four hours of collection. Fishers exact test for proportions was used to evaluate the frequency of *M. bovis* or *B. ovis* recovery in cases compared to controls.

Results

Pinkeye was diagnosed in 92 of 365 calves (25%). We collected data from 101 pinkeye cases and 58 con-

trols. As this is incidence density study design, animals could act as controls and cases, so these data came from 126 unique animals. *M. bovis* recovery did not differ between cases (23%) and controls (21%; $P=0.84$). Also, *B. ovis* recovery did not differ between cases (37%) and controls (24%; $P=0.11$). For severe pinkeye cases, *M. bovis* recovery was significantly more common among cases (36%) than controls (18%; $P=0.03$). *B. ovis* recovery did not differ between severe cases (45%) and controls (29%; $P=0.09$).

Significance

Although *B. ovis* was present in the study herd we failed to observe an association between *B. ovis* and pinkeye occurrence. It remains to be seen if this finding is consistent across herds.