

Characterization of Testing and Longitudinal Prevalences for PI-BVDV Cattle in the Beef Industry

E.T. Stevens¹, DVM, PhD; D.U. Thomson², PhD, DVM; N. Lindberg³, DVM

¹Rural Technologies, Inc. Brookings, SD 57006

²Clinical Sciences, Kansas State University, Manhattan, KS 66506

³Animal Medical Center, Great Bend, KS 67530

Introduction

The objective of this study was to evaluate the sample submission forms from a commercial PI-BVDV testing laboratory located in central Kansas.

Materials and Methods

In all, 1,490 sample submission forms, representing 153,716 head of cattle, were partially or fully completed. After reviewing the completed data set, we were able to analyze the PI – BVDV prevalence by weight, year, month, and by submitting client (cow-calf, stocker, or feedlot).

Results

The overall PI-BVDV prevalence for all submitted samples was 0.34% (524/153,716). Cattle with a weight of 300 lb (136 kg) or less had the highest prevalence

(0.43%) and cattle with a weight of 701 lb (319 kg) or greater had the lowest prevalence (0.23%). The highest yearly prevalence (Jan. – Dec.) occurred during 2007 (0.37%). For the PI-BVDV prevalence by month, January had the highest prevalence (0.44%), and the month of October had the lowest prevalence (0.21%). When the submitting client was identified as primarily involved in the cow-calf, stocker, or feedlot industry, the overall prevalence by operation was 0.38%, 0.55%, and 0.31%, respectively.

Significance

Based on the model adjusted odds ratios, cattle that weighed less than 300 lb had a greater likelihood of being PI-positive than cattle with increased weights. Several months of the year had a greater likelihood of having PI-positive animals. Based on operation, cow-calf and stocker operations had a greater likelihood of having PI-positive animals as compared to feedlots.