

Sero Prevalence of IBR in East Coast South Canterbury Dairy Herds

Summary

Infectious Bovine Rhinotracheitis (IBR) infections amongst dairy herds in Canterbury and North Otago appears to be extremely wide spread with 100% of herds surveyed having at least 60% of cows surveyed being seropositive for IBR antibodies.

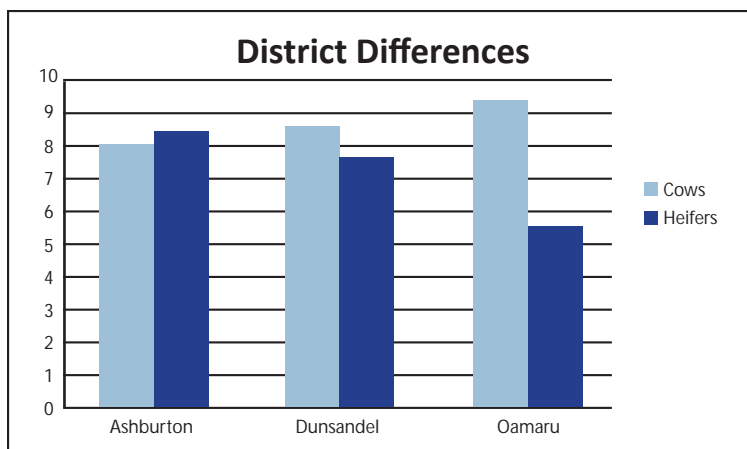
Study Design

Eight dairy herds from the Vetlife Dunsandel and Oamaru catchment along with nine herds from the Vetlife Ashburton catchment were asked to participate in a small cross sectional serological survey to ascertain the level of IBR infection amongst the dairy herds. The only exclusion criteria were that the cows had not previously been vaccinated with an IBR vaccine.

Ten mixed aged cows and ten first calving heifers were randomly sampled during milking using a clean vacutainer needle for each sample. The serum samples collected were analysed at Gribbles Christchurch for IBR antibodies using the IBR Elisa.

Results

- Every farm tested had at least 6/10 cows positive for IBR exposure as measured by antibody response.
- Only one farm had heifers that had not seroconverted at testing after apparent IBR exposure.
- More cows were exposed than heifers (87% cows vs 72% heifers).



The average from estimated plan start of calving (PSC) to testing date was 41 days for Oamaru and 55 days for Dunsandel and 62 days for Ashburton respectively. There was a positive correlation for the time of testing from the PSC which suggests why fewer heifers were seropositive in Oamaru. They were tested closer to the PSC so had less exposure time hence less seroconversion.

Individual farm data also suggested a positive correlation for the length of time after PSC and testing and amount of heifers seropositive.



Figure 1: Numbers of cows and heifers seropositive out of ten sampled per farm in Dansandel area.

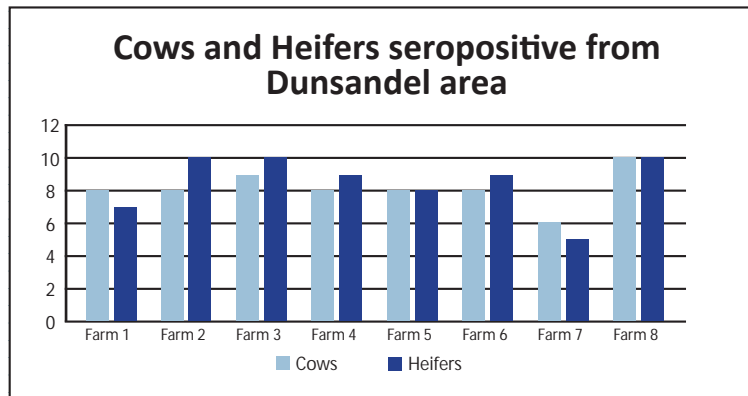


Figure 2: Numbers of cows and heifers seropositive out of ten sampled per farm in Ashburton area.

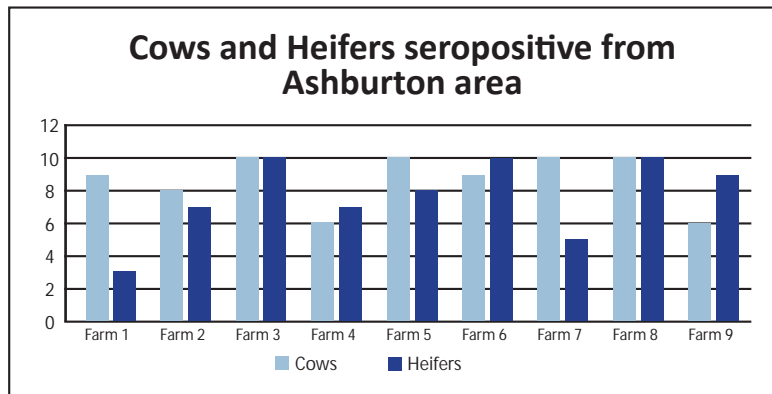
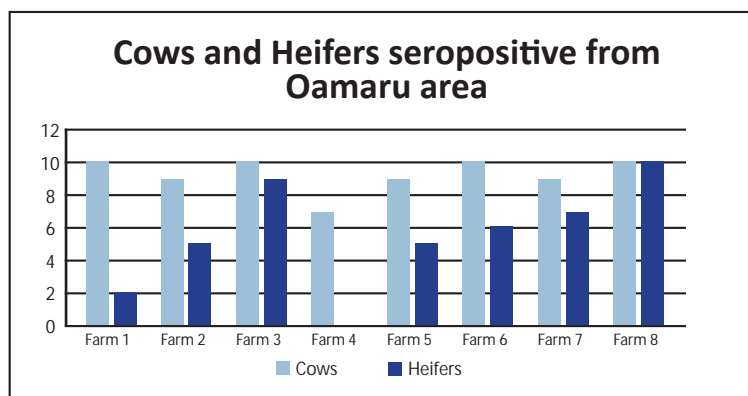


Figure 3: Number of cows and heifers seropositive out of ten per farm in Ashburton area.



Conclusion

These results, while limited in numbers indicates potential higher levels of exposure than previous studies have shown, particularly in the South Island. This raises the question as to what effect could this be having on milk production in these herds.

Hiprabovis 3 is the only vaccine currently available in New Zealand offering protection against IBR.

Acknowledgements

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