Risk factors associated with the retention of BVD+ calves during the compulsory eradication programme in Ireland

Clegg T.A.[a], *Graham D.A.*[b], *O'Sullivan P.*[d], *McGrath, G.*[b], *More S.J.*[b]

[a] UCD Centre for Veterinary Epidemiology and Risk Analysis, UCD School of Veterinary Medicine, University College Dublin, Belfield, Dublin 4, Ireland,
[b] Animal Health Ireland, 4-5 The Archways, Carrick on Shannon, Co. Leitrim, Ireland, [c]Irish Cattle Breeding Federation, Shinagh House, Bandon, Ireland

Background

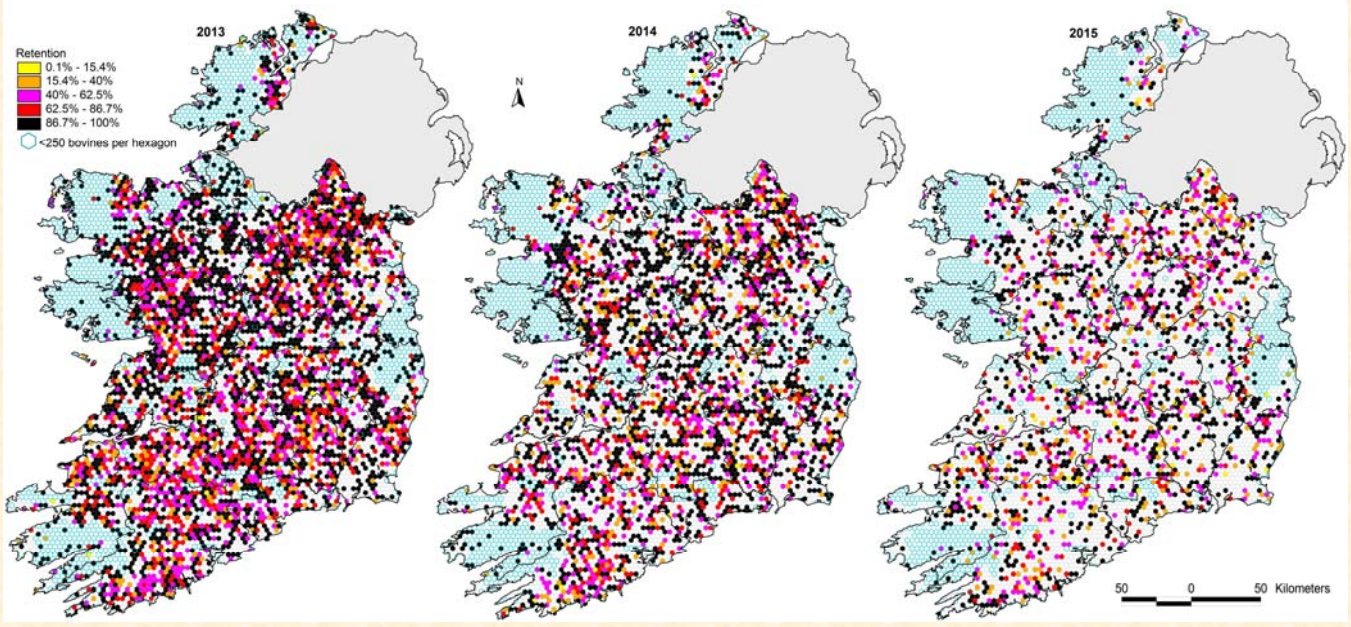
The Irish BVD eradication programme began on a voluntary basis in 2012, becoming compulsory in 2013. The programme relies on identification and removal of BVD+ calves. However, a minority of herd owners have chosen to retain BVD+ calves, typically with a view to fattening them to obtain some salvage value. The objective of this study was to describe animal and herd-level risk factors associated with retention.

Methods

The study population included all BVD+ calves born in Ireland in 2013 to 2015. A parametric survival model was developed to model the time from the initial BVD test until the animal was slaughtered/died on farm or until 31 December 2015 (whichever was earlier). A total of 29,504 BVD+ animals, from 13,917 herds, were included in the study.

Risk factors

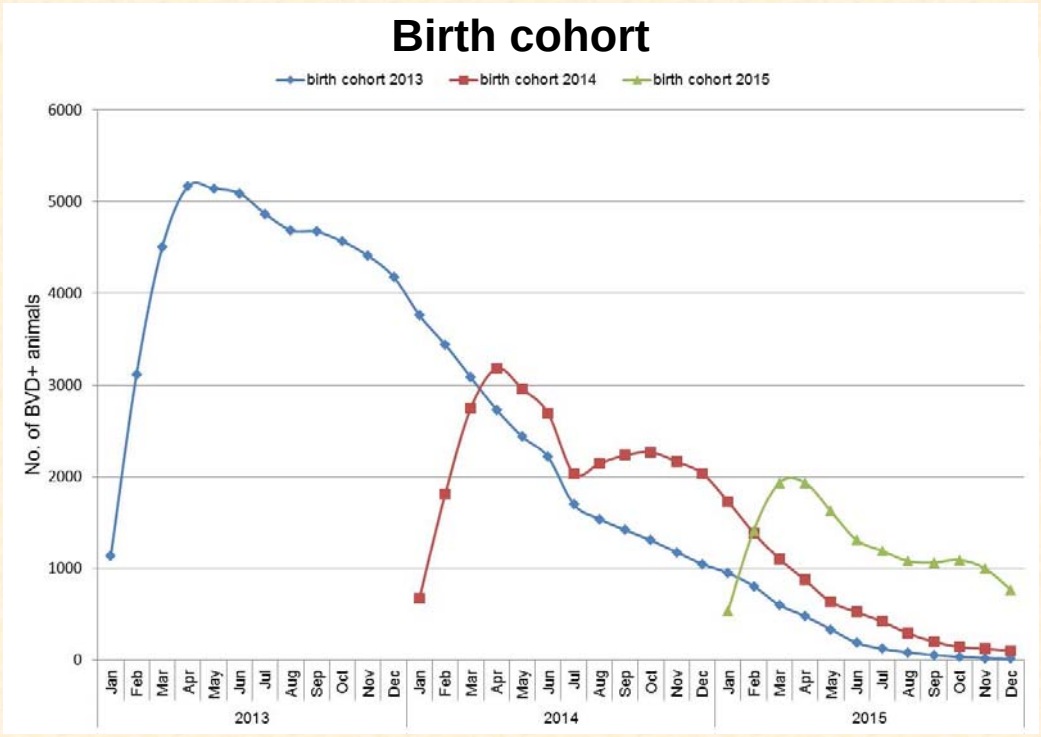
Location



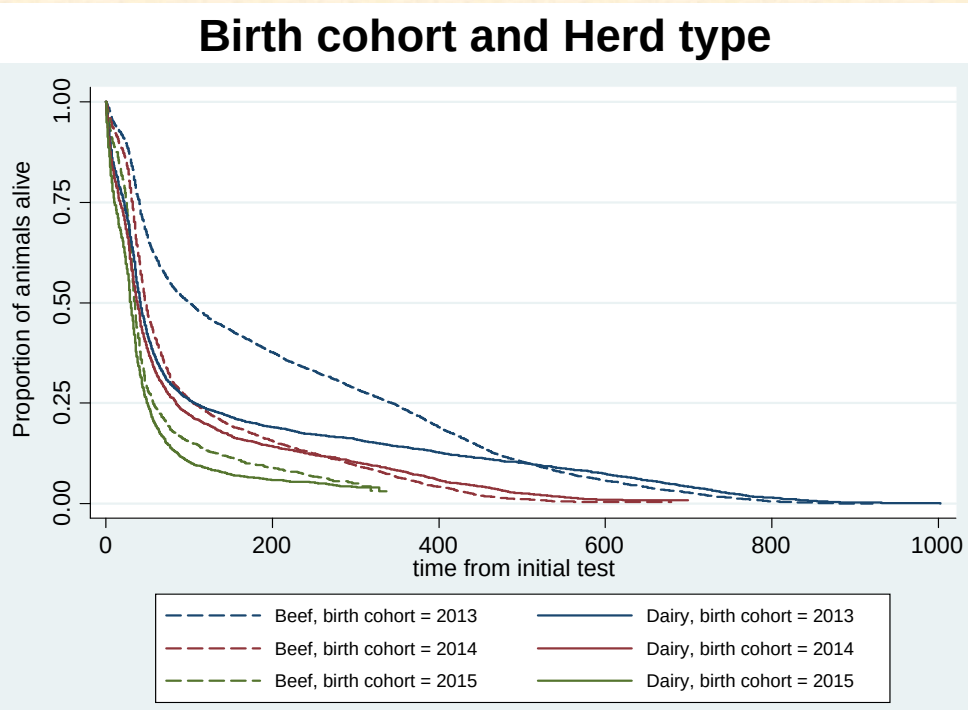
Other significant risk factors associated with retaining BVD+ calves for longer:

- Herds of smaller herd-sizes
- BVDPI (re-test +ve) animals
- Seasonal patterns, BVD+ calves born in the summer months retained longer particularly in beef herds
- Farmer not registering a mobile phone - may reflect a reduced level of communication or a proxy for a certain demographic of farmer in terms of age and awareness of the BVD programme etc.

Birth cohort



Birth cohort and Herd type



Conclusion

Significant progress has been made in addressing the issue of retention of BVD+ calves, however, there is a need for further improvement. Prompt identification and removal of BVD+ calves is critical to ensuring that optimum progress is made in a BVD eradication programme. A number of risk factors associated with retention have been identified suggesting areas where future efforts can be addressed.

Reference: Clegg T.A., Graham D.A., O'Sullivan P., McGrath, G., More S.J., 2016. Temporal trends in the retention of BVD+ calves and associated animal and herd risk factors during the compulsory eradication programme in Ireland. *Preventive Veterinary Medicine* 134, 128-138.