



Diagnosis and Control of Salmonella Dublin in Dairy Herds



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infected. However, successful control programmes are in place in Denmark and the Netherlands.

Five farms in southwest Scotland were recruited to the project. These farms *Salmonella Dublin* within the last three months. Ten blood samples were taken from calves between three and six months of age to assess how many had been exposed to the bacteria.

A risk assessment document was produced, which had been adapted from one used as part of the Danish *Salmonella Dublin* eradication scheme.

The Challenge

Salmonella Dublin is a major cause of poor calf health and mortality, as well as causing abortion, diarrhoea and milk drop in the adult herd. It is recommended that control focuses on improving hygiene and

available for assessing potential routes of transmission in the herd.

Serology is known to be a more sensitive method of detecting the presence of *Salmonella Dublin* in a herd than culture-based techniques.

The challenge was therefore to present a structured risk based approach that could be adopted commercially and would be a valuable herd health tool not previously commercially available in Great Britain.

The Research

Industry experience means that *Salmonella Dublin* to eradicate due to the creation of carrier cows, which do not clear their infection. Around 50% of herds which experience an outbreak become endemically



Serological monitoring of calves allowed the impact of these changes to be assessed, and is a useful diagnostic and monitoring tool.

The risk assessment document provided a useful, structured way to identify areas of weakness and control.

This work has been circulated around veterinary practitioners to increase awareness and adaptation of protocols.

Project Detail

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The Impact

A monitoring and risk assessment protocol is an effective management tool, which can complement or reduce reliance on vaccination.

The control of *Salmonella Dublin* within a herd relies on identifying potential routes of spread, particularly from cows to calves.

If you have questions on cow calving and calf management contact your local consultant or veterinary practitioner.

disease incidence in the herd or calf shed contact your vet or regional SAC Veterinary – Services Disease Surveillance Centres