

Vibriosis (Campylobacter) infection in cattle in Tasmania. – Dr Bruce Jackson

Background

Vibrio has been diagnosed in a number of beef and dairy herds in Tasmania over recent times, and the impact can be severe. In one case about a quarter of pregnancy tested in-calf cows in a large herd did not calve and three other herds that received cattle from that herd also experienced pregnancy loss. There was a very significant financial impact.

Vibrio is a chronic bacterial infection of the sheath of bulls. Infected bulls spread the infection at mating and female cattle may either return to service or abort, usually about half way through the pregnancy and this may not be noticed in extensive beef enterprises.

Your vet can take samples from empty/aborted cows or from older bulls to make a diagnosis if your herd experiences abortions or pregnancy/calving rates are lower than they should be.

Campylobacter infection in sheep is a different disease and is prevented using a different vaccine.

Treatment

Vibrio can be eradicated from cattle herds by using vaccine. If cows can be pregnancy tested and all empty cows culled and any cows that fail to calve (ie have aborted between pregnancy diagnosis and calving) can also be culled before joining, and no unvaccinated bulls, eg from neighbouring properties, mate with your female cattle, only the bulls need to be vaccinated.

If there is a risk that unvaccinated bulls could mate with your female cattle, or pregnancy testing and culling of empties and non-calvers before mating cannot be carried out, then all females should be vaccinated as well.

Two doses of Vibrio vaccine one month apart are required for good immunity, and then an annual booster to maintain immunity. Vibrio vaccine should be available through your rural supplier. Vaccination will not affect sperm production in bulls.

Prevention

Maintain good boundary fences. Make sure all introduced bulls have been vaccinated – ask to see a Cattle Health Declaration and check the current vaccinations section. You can vaccinate introduced bulls yourself, but make sure you have time to complete the vaccination course before joining starts.

Keep introduced pregnant cattle separate from other cattle until they have calved and cull any that fail to calve before bulls are introduced to that mob.

It may be a good insurance policy to continue Vibrio vaccination of bulls in the long term, especially if you trade in female cattle or boundary fences are not bull-proof.

Livestock Health Monitoring and Biosecurity

Vibrio has been recognised as a significant problem for Tasmanian cattle producers by the Livestock Health Monitoring program. Please see <http://www.tasanimalhealth.weebly.com/> for previous reports.

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