

South East Local Land Services Animal Health Update

“Vibrio” – What you need to know to protect your cattle

District Vet Helen Schaefer, Far South Coast

A number of properties in the region are affected by vibriosis each year. Vibriosis can affect both beef and dairy cattle. If you breed cattle of any sort, you need to know about this disease.

What is vibriosis?

Vibriosis, or bovine genital campylobacteriosis, is a sexually transmitted disease of cattle that can cause poor conception rates, embryonic loss, and abortion. It is caused by the bacterium *Campylobacter fetus* subspecies *venerealis*, and can be transmitted between bulls and cows/heifers during mating.

Would I notice if my cows were sick?

Cows infected with vibrio bacteria generally do not appear outwardly “sick”. Often the first thing that is seen is a higher than normal number of cows/heifers returning to oestrus, or “coming back on heat” following service. With a restricted joining period in a beef herd, this means a higher percentage will be empty at pregnancy testing. Abortion, particularly at five months or more gestation may also be seen.

What about my bulls?

Vibriosis is a sneaky disease. Bulls generally do not show any signs of disease. This means infected bulls can spread the disease to a large number of cows before it is suspected something may be wrong.

Is this something that I really need to be concerned about?

Vibriosis can lead to a significant loss in productivity. It has been estimated that the reproductive losses associated with vibriosis in beef and/or dairy herds can reduce your profit by anywhere from 35-65 percent.

How can I protect my cattle?

Vaccination is a simple and effective way to protect your herd. All bulls should be vaccinated against the disease. All that is required is two initial doses 4-6 weeks apart, followed by an annual booster.

To obtain Vibrovax®, the vibrio vaccine, please visit your local ag supply store or talk to your private vet.

Where tests show infection is present in the herd, your vet may recommend a more extensive vaccination program.

I think I might have vibriosis in my herd. What do I do?

If you have any questions about vibriosis, please contact your local veterinarian.

Theileriosis on the Coast

District Vet Steve Whittaker, South Coast

Early season cases of theileriosis have been seen on six farms in the Illawarra/Shoalhaven area.

Theileriosis is an infectious disease of cattle caused by a protozoan parasite called *Theileria*.

While *Theileria* parasites have been present in coastal herds for decades, a more pathogenic form of the disease caused by a variant strain of *Theileria* called Ikeda appeared in 2007.

As the disease is mainly spread by ticks, theileriosis cases generally tend to fall away during the cooler winter months when ticks are less active. So it is a little surprising to see *Theileria* occurring on so many farms at this time of year.

Typically calves in the 6-12 week age range have been affected. However a small number of cows on one local dairy were also affected, as well as a mob of 12-15 month old dairy heifers that had recently returned from agistment.

The *Theileria* parasite invades and shatters red blood cells so symptoms in affected cattle are associated with severe anaemia – lethargy and weakness, staggering and collapse, rapid breathing, and pale and/or yellowed gums. Milk production in affected dairy cows drops off sharply and pregnant cattle often abort. Death is the frequent unfortunate outcome of severe *Theileria* infection.

Theileriosis is a frustrating disease for both producers and vets alike. The disease is still poorly understood. There is no vaccine to prevent the disease and there are no really effective treatments available.

Treatments usually involve injection with either an antiprotozoal drug called imidocarb or an oxytetracycline antibiotic. Early treatments are likely to be more successful but results are frequently disappointing. Minimising stress on affected animals remains an important part of management and handling should be minimised.

Good management strategies are thus particularly important to help reduce the risk of disease outbreaks:

- source cattle locally rather than from areas where theileriosis is uncommon
- introduce cattle (particularly pregnant cattle) at a time when tick vectors are less active
- isolate introduced cattle and monitor closely for 4-8 weeks
- treat introduced cattle with a tickicide and keep them on good feed and in good condition
- avoid yarding and stressing cattle at a time when there is high risk of disease.

Bulls in beef herds are cattle too – don't forget them!

District Vet Kate Sawford, Palerang

In the lead up to joining it is important to make sure bulls are ready to perform their job.

When purchasing bulls, consider the traits that are most important for your enterprise and review relevant estimated breeding values (EBVs). Ensure that bulls have had a veterinary bull breeding soundness examination to help ensure bulls are fit for purpose.

Observe bulls in yards and paddocks to get an idea of temperament. Make sure all bulls come with a national cattle health declaration so you know the vaccinations and health treatments they have received.

When new bulls arrive on your place unload them into the yards. Bulls from different properties of origin should be placed in separate yards. Provide hay and water and leave the bulls to settle in until at least the following day at which time give routine health treatments as required, such as quarantine drenches and vaccinations.

For bulls already on your property an annual veterinary bull breeding soundness examination is strongly recommended at least two months prior to joining. This test allows you to rank your bulls, predict the number of cows each bull can be joined with and if the bull is suitable for single or multi-sire joining. A minimum of two bulls per 100 cows is recommended. It will also allow you to detect arthritis, joint problems and penile deviations that could prove disastrous. Bulls should be body condition score 3.0 at time of joining.

Bulls should be vaccinated with a 7-in-1 vaccine, Pestigard® and Vibrovax® and drenched for roundworms, preferably with an oral drench, prior to joining. Don't forget that if you have fluke on your property bulls will need a fluke drench as well.

Treat all bulls as potentially dangerous. Ensure your handling facilities are suitable for handling bulls. Avoid getting in a yard with bulls. Never work bulls alone. Temperament is largely a genetic trait and therefore do not keep any bulls that step out of line.

Bulls are subject to the same livestock movement requirements as any other cattle. If you are selling or moving bulls they are required to have an NLIS tag. However, don't put yourself at risk to tag bulls. If you cannot safely handle bulls contact your nearest Local Land Services office to arrange for a permit to move unidentified stock.

Pregnancy toxemia

District Vet Fiona Kelk, Yass

There have been several cases of pregnancy toxemia in the Monaro this year that have been attributed to a combination of cold weather, inadequate supplementary feeding, and provision of pre-lambing treatments very close to the start of lambing.

A ewe that is in late pregnancy needs to supply its own requirements for protein and energy, as well as those of the foetus(es). During the last six weeks of pregnancy, demands from the foetus increase dramatically as 75 percent of growth occurs over this period. Colostrum and milk production place further demands on the ewe.

The demands of the foetus for protein and energy must be met first, which can leave the ewe with nothing to maintain herself with if she is not eating enough good quality, highly digestible pasture. If this circumstance occurs, she will try to source energy from her own body. When this event happens ketones, a nasty by-product of fat and muscle breakdown, are produced. Ketones cause the ewe to become sick and pregnancy toxemia results.

What can initiate pregnancy toxemia

- not physically eating enough good quality feed – especially with twins or triplets and reduced rumen capacity as demand when carrying multiples is around 1.6 times maintenance
- starved during extended periods – yarding for shearing/crutching/pre-lamb treatments
- concurrent disease reducing feed intake – foot abscess
- bad weather reducing grazing
- lack of appetite – discomfort and ewe fatness, especially evident in older mature ewes.

What signs will you see

- initially - off feed, listless, aimless walking, muscle twitching and grinding teeth
- progress to blindness, unsteady on feet and go down with death occurring 3-10 days after initial onset

- if you have affected ewes is it an indication that the rest of the mob is at risk and requires supplementary feeding.

How to treat the disease

- Vytrate Liquid Concentrate ® 160 ml every 4-6 hours until affected ewes start eating. Give 70 ml of a 4-in-1 mineral injection under the skin.

Prevention

- supplementation with grain will help avoid most problems
- extreme care if crutching or shearing pre-lambing – ewes to spend minimal amount of time in and around the shed and yards
- quiet and efficient pre-lamb vaccination and drenching of ewes.

The pros of grain supplementation

You may be able to increase the amount of energy delivered to the ewe. The rate of ½-1 kg/day would be required to affect change, depending on grain type and available pasture. Add stock lime to grain ration at 1-1.5 percent to avoid calcium deficiency causing milk fever in late pregnancy.

The cons of grain supplementation:

- feeding grain on a trail may create mis-mothering – feeding early afternoon will help to limit problems
- most grains and pellets must be introduced gradually over several weeks
- some of those at risk may be too uncomfortable to walk to the grain trail anyway
- those most at risk may have foot abscess and reduced mobility
- lick feeders would certainly worsen foot abscess if ground becomes boggy around feeders. Feeders can be moved frequently, or the conveyor belt placed on the ground.

ReproActive workshops in Yass and Bega

District Vet Alex Stephens, Yass

Maximising the number of calves on the ground in a defined joining period is one of the primary objectives of a beef breeding business. Most beef producers know the theory yet every beef producer knows that some years things don't go quite to plan. Some years our weaning percentage (the number of weaners compared to numbers of cows joined) falls below par. Many causes can be to blame: bull breakdowns, nutritional deficiencies, heifer management, and reproductive diseases. Pestivirus infection in the herd is a key cause of reproductive wastage in the Yass district, but a bull breakdown can be just as common and expensive. With current cattle prices producers should be aiming to maximise their reproductive success as much as possible and prevention of problems pays.

Yass Vet Hospital, supported by the Local Land Services and Zoetis, will be discussing management of bulls, herd reproductive health and joining periods at a ReproActive workshop at 'Ravenswood' Yass NSW on Tuesday 12 of September. A similar ReproActive workshop will also be run in Bega on 4 October.

This day is both a recap on the theory and is hands on practical, with demonstration of a bull breeding soundness exam and condition scoring opportunities. It will provide an excellent opportunity to recap on the important basics of reproductive success while giving you more guidelines to take your management and observation skills to a higher level to get the best results every year. Some of the topics to be covered include: ramifications of condition scoring in the reproductive management of cattle; determining critical mating weights for heifers; optimizing joining periods for heifers and cows; and bull management before, during, and after the joining period.

Some of the common reproductive diseases such as vibrio, leptospirosis, and pestivirus can be vaccinated against, and yet many producers are not in the habit of vaccinating against these diseases. Understanding the risk of these diseases from a local perspective and having a plan as to how to keep these diseases out or

fit these vaccinations into your management schedule can make it easier to develop a management strategy. Continual surveillance of farms in the Yass district show that it is rare to find a farm that has not had some pestivirus exposure.

The final focus of the day will be on problem solving lower reproductive rates, the importance of your observations, and how an early response can help to diagnose the issue.

Yass event

When: Tuesday 12 September 8.30am-2.30pm

Where: Cavan Station (Ravenswood), 535 Boambolo Rd, Yass, NSW

Registration: www.reproactiveyass.eventbrite.com.au

Bega event

When: Wednesday 4 October 8.30am-2.30pm

Where: 'Kingswood', 722 Princess Highway, Bega, NSW

Registration: www.reproactivebega.eventbrite.com.au

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