

Animal Health Update

South East Local Land Services

July 2021

SOUTH EAST MONTHLY DISEASE SURVEILLANCE RESULTS

Lou Baskind District Veterinarian Queanbeyan-Palerang.

Your local District Vet can help you to investigate, diagnose and manage herd health or mortality issues in your herd or flock. They provide impartial advice and can assist you with disease management and your biosecurity plan. Each month we provide this report of diseases and issues detected and managed in the last month by producers, their veterinarians and animal health advisors.

Our district vets across the South East continue to work extensively with sheep affected by **Footrot** and other foot health issues. Footrot is a contagious bacterial disease of sheep and goats. There are many strains of the bacteria and they vary in the severity of impact. Because of the animal welfare and economic impacts, footrot is a notifiable disease in NSW with regulatory support for compulsory eradication programs in flocks infected with the severe form of the disease (**Virulent Footrot**).

District vets in Braidwood and Goulburn have been involved in disease investigations for **Ovine Johnes Disease (OJD)**. OJD is a bacterial wasting disease that can have significant costs in terms of weight gain, wool production and mortalities. If left unmanaged, losses of around 10% of adult sheep can occur each year. Signs include wasting and emaciation in adult sheep, sometimes with diarrhea. In some cases, the problem may look like worms, but will not respond to drenching. The diagnosis of OJD requires assistance from a veterinarian. Johnes Disease is a notifiable disease in NSW.

A case of sudden death in cows showed signs of **Anthrax**. Anthrax is a soil bacteria that poses a danger to livestock and people. It usually presents as the sudden death of one, or a group of animals. Anthrax can kill stock of any age or class with no warning and can result in significant losses. Typically, there will be non-clotting blood from the orifices of a carcass. In this case the district vet was able to perform rapid testing and Anthrax was ruled out. The South East is not within the typically described 'anthrax belt', so cases here would be unusual. However, anthrax is a notifiable disease in NSW, and anyone who suspects anthrax must report it immediately.

Ongoing rainfall has led to some properties being inundated with water in low lying poor draining paddocks. A case of scours and deaths in 8 month old merino wethers is currently under investigation, with the suspected cause being a bacteria called **Yersinia**. This bacterium survives in wet, cold and low oxygen environments. Yersinia infections tend to be associated with stress factors such as change of diet, starvation, trace element deficiency, shearing, weaning, lambing, and the onset of cold, wet, windy weather. If you have scouring, weight loss or deaths in sheep the most common cause is intestinal worms. However, if treatments for worms are not effective, contact your vet or District Vet to investigate further.

Avian Influenza is a respiratory disease of birds that can devastate our poultry industry and has the potential to infect people. If you have chickens showing respiratory disease symptoms it is important to report this to your veterinarian or district veterinarian. The laboratory fees for exclusion testing for the notifiable diseases **Avian Influenza, Newcastle Disease and Infectious Laryngotracheitis**, are paid for by the Department of Primary Industries. The substantial risk factor for the spread of Avian Influenza is wild waterbirds (e.g. ducks). Reporting respiratory symptoms in poultry is the right thing to do to stop the spread of these infectious diseases.

Feral animal aerial shooting programs have been completed in many parts of the South East in the last few weeks. As part of these programs our district vets have been doing **animal health surveillance** by examining and sampling the feral animals in their regions. Samples have been collected from deer and feral pigs, to assess for diseases that pose a risk to our livestock, as well as zoonotic disease (disease that can transmit to humans). Examples are **swine brucellosis** and **leptospirosis**. These animals appeared in incredibly good health, but they can be carriers of diseases without symptoms. Laboratory results are pending, so watch this space.

TETANUS

Henry Clutterbuck District Veterinarian Goulburn

Highlights

Cause: *Clostridium tetani* bacteria enters via a deep wound and releases a toxin that causes paralysis

Affects: All mammals, but especially horses

Risks: Deep wounds contaminated with soil or faeces

Diagnosis: Strongly indicated by clinical signs, requires confirmation by a vet

Treatment: Sometimes successful with early diagnosis and rapid treatment

Prevention: Vaccination.

What is tetanus?

Tetanus is a disease caused by the bacterium *C. tetani*. The bacterium releases a neurotoxin, Tetanospasm, around 10-14 days after it infects a deep wound. The toxin effects muscles, starting at the site of infection and becoming generalised over a few hours or days. Death occurs when the muscles of the heart and respiratory system become paralysed. A typical animal infected with tetanus is stiff and unsteady, sensitive to handling, and unable to swallow. This will progress to a rigid 'sawhorse' posture with extended limbs and neck, lockjaw, and spasms or collapse when startled.

Which animals are at risk?

Tetanus most commonly affects unvaccinated horses and sometimes lambs. The bacterium enters the body through any deep wound, especially foot puncture wounds in horses and marking wounds in lambs (e.g. castration, docking, vaccination). Tetanus can also occur in the umbilicus of newborn animals. Horses are more susceptible to tetanus than other animals.

Diagnosis

If you suspect tetanus, call your nearest Local Land Services District Veterinarian. The diagnosis is confirmed based on history and symptoms, and rapid treatment can be curative.

Prevention/Treatment

Vaccination is effective at preventing tetanus, and prognosis is good if it is combined with treatment in suspected cases. A vaccination program with 2 doses 4-6 weeks apart is required to achieve long lasting protection. Annual boosters are also recommended for horses, ideally 4-6 weeks before foaling in brood mares.

Treatment involves re-administering the tetanus vaccination if a deep wound is obtained, and cleaning and dressing the wound thoroughly. If clinical signs are observed, tetanus antitoxin and penicillin can be used to reduce the effects of tetanospasm and stop more toxin from being produced.

THE PERILS OF NOT GETTING THE BALANCE RIGHT

Mark Doyle District Veterinarian Bega

There was a case just before the bushfires of liver failure in a small flock of sheep on the coast. It took a bit of sleuthing to get to the bottom of it but there was a very valuable lesson in the case for everyone. This farm had been having problems some months before with their goats. The kids were being born not viable or very weak. After the private practitioner had sought our help and we were able to deduce that the most likely cause of all the kidding problems had been a nutritional deficit through the does pregnancy.

The farmer was keen to get on top of the problem and was horrified to think that they may have been underfeeding their stock. They bought supplementary feed, lots of it and varied, and began feeding it to their stock. Some new sheep were purchased and these lived in the same vicinity as the goats.

As the drought worsened the farmer did what we all do, and gave their precious animals an extra bit of a scoop of this and that to help their animals along as there didn't appear to be an end to the conditions.

Then some months later, the sheep started dying. When we were called the farmer had been asking about theileria in sheep (this doesn't occur) as from their research the symptoms of the sheep had been similar to this cattle disease. When quizzed on the symptoms; lethargy, anaemia and red water we agreed the presentation was similar. However, this was also indicative of another condition and with the help of the laboratory at Elizabeth Macquarie Agricultural Institute (EMAI), copper toxicity was diagnosed. The condition was exacerbated in this case by the sheep's chronic exposure to fireweed, but either way the livers of these sheep couldn't handle the load.

Once the levels of copper were deduced, we worked backwards to determine where it came from. High copper levels weren't known in the area and the sheep weren't strictly being supplementary fed. But why were they so very fat!

As it turned out the supplement would be fed out in a trough to the goats, but the sheep would come in and lick up the remains. What they were licking up was usually the 'fines' or finer richer higher density and higher nutrient feed so the sheep were getting an overdose of the minerals from some of the supplements being used. When the sheep were separated from the goats and not getting supplementary fed the problem resolved. As well as that a hard look was taken at the feed being issued and the supplementary feeding regime was stepped back markedly. In an effort to be kind to their stock the farmer had overloaded them with goodness. Sometimes you can get too much of a good thing!

So, the lesson in this scenario is that supplementary feeding is important and worthwhile but should be done in consultation with a nutrition professional. Ruminant nutrition is a specialised area and there are people who can help you with supplementary feeding stock. It is not wise to 'go it alone' until you have a lot of experience feeding stock. You can find help in your local produce store or seek the help of a consultant. Your local ag adviser or district veterinarian at Local Land Services can also help with this.

RESIDUES – WHERE DO THEY COME FROM?

Mark Doyle District Veterinarian Bega

How often do you read the label in fine detail? Do you check it every time you buy something at the shops? I know I don't!

When it comes to veterinary medicines for stock we definitely should though. Information the world over on chemicals is constantly changing and updated and the case is no different for drugs and pharmaceuticals we use in our livestock.

Different brands of what we think of as the 'same drug' often have different withhold periods (WHP's) and Export Slaughter Intervals (ESI's) and it is very important to take these into account in your system of production. There have been plenty of cases of switching mastitis drugs and not noticing the increased WHP on the new drug only to have to send thousands of litres of milk down the drain, and that's in the good situations where it is detected early!

The WHP indicates how long an animal has to be kept after treatment before it or its' products (i.e. milk/eggs) can be used. Usually the WHP will say what it refers to – i.e. 'meat' or 'milk' or 'eggs'. The ESI is a period of time the animal must pass after treatment before slaughter so that its' products are suitable for export overseas.

Sometimes this is much longer than the WHP and it should be noted on NVD's if animals are sold within an ESI. The WHP and ESI should be clearly visible on chemicals that you buy for use in stock. If you are unsure talk to the provider of the chemical and/or your district veterinarian. Using products 'off-label' often means a longer period of time will have to be observed and even 'novel' treatments may have a WHP so be careful with that backyard brew!

Veterinarians are usually very good at this and will print you a nice little label with the WHP written on it (as well as it being on the label on the bottle) but the same goes for drenches and other chemicals purchased from non-

veterinary sources. If it is going onto or into the animal or down it's throat you should always check the WHP and ESI!

Australia has a well structured system to detect and find the cause of detections of chemicals in meat and foodstuffs. This will result in a traceback and investigation of the source of the problem. This is not a pleasant experience for the farmer or investigator involved, especially when they result in hefty fines and corrective action. The best course of action is not to let it happen in the first place – READ THOSE LABELS AND RECORD ALL TREATMENTS!

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