Animal health advice for producers in the Hunter




Winter 2021

FLOOD RISKS

The recent flooding has significantly impacted a large proportion of the region, with reports of losses of livestock, crops, pastures, and infrastructure. While these effects are noted immediately during the event, many other impacts occur as a result of flooding; particularly worrisome are the health and disease concerns for remaining livestock.

A number of conditions occur more frequently post-flooding and therefore frequent monitoring of stock and their environment is imperative to ensure early treatment.

Lameness

Persistent wetting of the feet, that occurs with flooding, leads to softening of the hooves and therefore increased risks of trauma (e.g. bruising and penetration wounds). This can then lead to infections within the hoof and lower limbs causing lameness; ranging from hoof abscesses to foot rot. Lame animals should be examined and treated by your regular veterinarian.

Internal Parasites

Worm larvae can survive much longer on pasture in moist conditions and parasite burdens may increase rapidly. As well as more exposure, susceptibility to worms is also increased during times of floods due to a decreased immunity with high stress events. Gastrointestinal worm infestations can cause scours, loss of condition, and poor growth rates. Barber's Pole can also cause severe anaemia (pale mucous membranes such as gums, eyelids or vulva). Faecal and/or blood examinations can be performed to assess the level of infestation; affected animals should be treated with deworming drenches.

Leptospirosis

Leptospirosis is caused by *Leptospira* bacteria which favour warm, moist environments including water-logged soil. Flood waters are often a frequent source of Leptospirosis from animal urine. **There is frequently a spike in human and animal leptospirosis cases after flooding.** We have recently been advised of serveral local cases of Leptospirosis.

It is well worth ensuring your stock are up to date with their 7 in 1 vaccination (covers clostridial disease plus leptospirosis). Infected cattle shed the bacteria in urine, placental fluid and milk and can do so with no outwards sign of disease. Other cattle, people and animals achieve infection through ingestion or contact with infected fluids into wounds or mucous membranes (ie splash in the eye or mouth). While vaccinating cattle already infected with Leptospirosis is not curative, it might however ensure that the disease is not spread to other cattle on your property. Dogs are also at risk of leptospirosis and can be vaccinated with a dog specific vaccine.

In young animals, Leptospirosis can present as illness with depression, fever, and bloody urine. Infected older animals can show no signs, but can also experience reduced fertility,

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late term abortions, still births or reduced milk production. Treatment of affected animals can be instituted with antibiotics by your veterinarian.

Leptospira infection in humans causes flu-like symptoms which can become life threatening. Vaccinating cattle with 7 in 1 greatly reduces the risk of disease in cattle and therefore the risk of exposure to humans and other animals.

Blackleg

Blackleg is a common Clostridial disease seen in cattle that poses a higher threat during flood times as a result of increased numbers of spores in the environment. It occurs when bacterial spores enter the body via ingestion or wounds and then localises in muscle tissue. When the tissues become bruised, the bacteria multiply and produce toxins which lead to gas gangrene of the affected muscle, severe illness and rapid death. Animals that have died from Blackleg often have gas accumulation under the skin of the upper hind limbs or fore limbs, undergo rapid decomposition and bloating and are usually found lying on their side with the affected leg up. Blackleg can be effectively prevented by vaccinating with 5 in 1 or 7 in 1.

Plant Toxicities

The aftermath of a flood can increase the risk of some plant toxicities. Reduced feed availability can force stock to graze less palatable toxic plants or plants that accumulate nitrogen cyanide leading to sudden death if ingested. In the case of suspected plant toxicities, it is advisable to move livestock to alternative pastures as soon as possible and seek veterinary assistance. It is also important to note that water sources can also become contaminated resulting in algal blooms that can cause disease. HLLS can assist with water testing for suspect algal blooms.

Pink Eye and other eye infections

Following floods eye infections can be a problem. This could be from increased fly populations, increased feeding of hay and silage scratching corneas as the cattle feed or bacterial contact during time spent in flood water.

Any bacterial infection of the surface of the eye can result in reduced production and blindness. Affected eyes initially appear watery and may have blue or white discoloration to the cornea or surface of the eye, this can progress to larger ulcerated lesions. Treatments are available from your veterinarian and commonly include an antibiotic eye cream. Eye infections are painful and anti-inflammatory treatment is advisable and an eye patch.

Mustering, yarding or trucking animals, which may occur more frequently during flooding, results in close contact that can increase the spread of Pink Eye infections. There is a vaccine available that can reduce the chances of contracting the disease, which can be used prior to exposure periods.

FLOOD MUD SCOURS IN CATTLE

Flood Mud Scours or Yersiniosis can cause a severe diarrhoea and death in cattle. Adults are usually affected although it is also seen in yearlings.

It is often seen in cool wet weather in cattle grazing wet, waterlogged or recently flooded pastures. Mud contamination of dry feed and muddy conditions as cattle congregate around silage and hay feeders is a common risk. Thus, this winter might be a particularly risky period. Often several cases are seen over a short period on properties when conditions are favourable for the bacteria and cattle are exposed to a common source of the bacteria.

Cause

Flood Mud Scours is caused by the bacteria Yersinia psuedotuberculosis. The bacteria can be carried by a range of animals including cattle, rodents and birds. Infected animals shed the bacteria in their faeces contaminating pastures. The bacteria can survive for long periods and multiply in mud and water at cool temperatures.

There is often significant stress on affected animals (predisposing to infection) ie lactation and pregnancy, wet weather, wind, concurrent low nutrition and parasite burdens. Thus ensuring good health, nutrition and being up to date with de-worming treatments can help prevent issues.

Clinical Signs

Flood mud scours often occurs in an outbreak situation involving several cattle in a herd. Occasionally animals will be found dead without showing prior clinical signs, however more frequently cattle will become depressed, off feed and develop a profuse watery, foul smelling diarrhoea. Affected cattle become dehydrated and often become recumbent. Death usually occurs within three to five days.

A post-mortem examination reveals swelling of the intestinal lining, and watery foul smelling gut contents. The diagnosis can be confirmed by submitting faecal samples (from alive or deceased animals) to the laboratory and culturing the bacteria.

Treatment

Early treatment with an appropriate antibiotic will save many animals, however when treatment is delayed it is much less successful. Suitable antibiotics must be prescribed by a veterinarian; withholding periods for meat and milk apply. Moving cattle to a different paddock as well as moving hay and silage feeders after each bale are also important steps to prevent further cases.

Isolation of affected animals from the rest of the mob is recommended. Frequent observation of cattle grazing high risk paddocks is recommended to enable early treatment.

COCCIDIOSIS IN CALVES

By Georgia Rayner,

My Placement with HLLS, for final year veterinary studies in April/May, has been a very busy couple of weeks, investigating livestock health and production issues as a result of the March Mid Coast floods. We have been contacted by a number of beef and dairy producers with groups of sick calves. Sometimes the calves have obvious scours or respiratory signs but other times they were lethargic or found dead. The issues have been in young calves that were only a couple of days old when the floods hit to older 6-12 month old calves.

The common thread amongst all cases is flood induced stress affecting immunity through time off feed, lower nutritional intake, adverse weather and an increase in pasture contamination and disease introduction after floods. Some cases involved feeding of flood affected silage which not only has low nutritional value but can also be contaminated with moulds and bacteria such as listeria. Wet paddocks with longer pathogen survival times are also a problem.
Veterinary diagnostics were undertaken by Hunter Local Land Services, as part of flood recovery work but also for the purposes of district disease surveillance. This involved both physical examinations and blood and faecal sampling of ill animals as well as post-mortem of animals that had died that day or were euthanised on welfare grounds. Post-mortem is most diagnostic when conducted straight after death as this limits post-mortem changes and bacterial proliferation which can confound results.

These investigations found a range of disease-causing agents involved.

While we are yet to diagnose flood Mud Scours (caused by yersinia bacteria) we are on the watch for it and ask all producers to investigate any cases of scours in calves and adult cattle. Please refer to the Flood Mud Scours article also in this edition.

Georgia examining a group of dairy heifers affected by flood water.

Salmonella is another bacteria that has been an issue and in particular Salmonella Wangata has been found this past couple of weeks in calves. These calves presented with pneumonia or scours. Like many calf scour causing agents (Cryptospridia and E.coli), Salmonella can cause with disease in people and thus ensuring excellent hygiene when handling sick calves is crucial to protect yourself and your family. It is very easy to bring these diseases into the house on clothes, hands, shoes etc.

Salmonella Wangata is most likely from the environment and is associated with warmer temperatures, proximity to wetlands and amphibian species. Early diagnosis and treatment (oral fluids and antibiotics) is critical to prevent calf deaths.

A number of calves have also succumbed to Coccidia infection.

What is Coccidiosis?

Coccidia is an internal parasite that commonly causes disease in young stock aged between two and eight months. However, calves as young as four weeks can be affected. The main source of infection for young animals are the faeces of clinically affected or carrier animals in the herd. The most favourable conditions for Coccidia to thrive in the environment are moist, and temperate or cool conditions. If these conditions persist, eggs can survive in the environment for up to two years.

There are many factors that contribute to the development of Coccidiosis in calves. These include:

- Overstocking
- Cooler and moist seasons
- Rearing young and older calves on the same paddock as the older claves shed coccidia
- Feeding on the ground
- Reduced immune function as a result of stress (such as the floods), poor nutrition and concurrent disease
- However, in some cases the producer is doing everything they can to prevent the issue and it still causes problems.

Clinical signs of Coccidia

Typical clinical signs include:

- Diarrhoea that contains fresh blood or mucous (but sometimes just watery scours)
- Malodorous faeces
- Lethargy
- Dehydration
- Straining to defecate
- Reduced appetite
- Loss of body condition
- Pale mucous membranes
- Sudden death

Georgia removing a brain from a euthanised weaner. There were three young weaners on this farm down with suspected bacterial infection of which salmonella was a key differential. Due to their history of silage consumption listeria and botulism were also considered.

Diagnostic tests

The two best ways to diagnose Coccidiosis in cattle are faecal examination and post-mortem.

The vet will collect fresh faeces from sick calves to be sent to the laboratory for examination. It should be noted however, that the presence of Coccidia in faeces does not confirm disease as calves can manage a low level of coccidia. The absence of Coccidia in faceces also does not confirm the animal is free of disease. This commonly occurs when Coccidia is no longer being shed in the faeces, yet there has been considerable intestinal damage that can only be seen with post-mortem.

Post-mortem is often the most useful diagnostic tool. Tissue samples are collected and sent off to the laboratory to be examined microscopically by a pathologist. Results can take up to 10 days to be returned.

Therapy for Coccidia

The main form of treatment is Baycox (active ingredient – Toltrazuril). This is an oral drench that can be administered as a single dose to calves up to nine months of age. It is effective at killing all developmental stages of Coccidia.

Animals that become unwell with Coccidiosis should be isolated from healthy animals to minimise transmission between stock. Affected animals should be fed a highly digestible and high-quality feed to ensure they are receiving the best nutrition possible, and those animals that are clinically dehydrated should be supplemented with fluids and electrolytes. Provision of clean bedding, water and feed is important.

Coccidia Prevention

Prevention of Coccidiosis is important to avoid severe disease and potential death in young animals, as well as to reduce its economic impact on production. This involves:

- Reducing stocking rate
- Undertaking rotational grazing and separating calves into age groups
- Treating all animals in a group
- Moving animals to uncontaminated areas
- Avoiding faecal contamination of feed and water
- Minimising stressful events
- Administering a single oral treatment of Baycox prophylactically to all calves when Coccidiosis has been diagnosed in your herd by your vet.

By Georgia Rayner, Veterinary Student, Charles Sturt University

LUNG WORM INFECTION IN CALVES

The wet weather and floods has also brought with it a few uncommon cases of Lung worm infection in calves. Lung worm is usually well prevented through the use of Mectin based drenches and paddock rotation and thus is normally well managed and not often seen these days.

However, the wet weather seems to have created ideal conditions for lungworm contamination on paddocks. The couple of cases thus far have been on dairy farms with dairy heifers in set stocked paddocks. Calves under 10-12 months of age are most susceptible.

Lung worm is shed in faeces and normally the larvae stay within 5cm of dung. However, growth and sporulation of fungi in dung can distribute the larvae up to three metres on pasture. Flood water and heavy rain can also distribute the larvae more widely creating an increased infection risk for cattle.

If you have calves (on pasture) with a persistent cough and look ill thrifty with a rough coat please have a chat to your vet and consider lung worm and drenching. Coughing calves is also often caused by respiratory viruses thus veterinary involvement is helpful to achieve a diagnosis.

Lung worm can be diagnosed from a faecal sample (but requires a special Baerman technique thus the samples needs to be sent the laboratory). It can however be difficult to find the larvae in faeces as the infection may be causing problems as the lung worm grow in the lungs but they are not yet producing eggs. Catching mucus as a calf coughs and having that examined by a lab can also be useful, if you are quick and so inclined! The couple of cases over the past few weeks have been diagnosed through a post mortem by Hunter Local Land Services District Veterinarians.

BOTULISM – RODENTS AND CONTAMINATED SILAGE

Botulism can pose a threat in the aftermath of a flood, particularly if cattle are feeding on wet fodder, rotting plant material or silage bales that might be contaminated with dead rodents, lizards or snakes. The anaerobic environment (i.e without air) of these situations enables the botulism bacteria to flourish and produce the botulism toxin.

Producers considering making or introducing silage to their stock or buying silage from mouse plaque affected areas should consider the risk of botulism and possibly protecting stock with a botulism vaccine.

The risk of botulism intoxication of a large number of stock is increased if silage bales are included in a partial or total mixed ration as the toxin can be more widely distributed in feed. However, because only a minute quantity of the toxin is needed to affect cattle it is common for more than one animal to be affected even when feeding from a single contaminated silage bale.

When livestock ingest this contaminated feed, the toxin causes weakness, which may progress to flaccid paralysis, recumbency and death. There is no successful treatment for botulism thus accepting or reducing the risk are the only options.

Vaccination may be prudent in times of high risk of feed contamination by rodents or feeding silage in mixed rations. A botulism specific vaccine is necessary as the 5 in 1 clostridial vaccine does not provide protection against botulism.

The risk of contamination can also be minimised by enacting rodent control measures around the farm, especially around materials to be fed to stock. Hay and silage should also be checked before being fed to animals to ensure that they have not been contaminated by animal carcases. Contaminated feed should be disposed of and not fed to stock. Any stock killed by Botulism should bedisposed of by deep burying.

If considering vaccinating your stock against botulism, please be aware that the Hunter and Mid Coast is a non-endemic area for Botulism. This influences both local vaccine availability and the choice of vaccine type.

Produce stores and vet clinics don't routinely stock Botulism vaccines thus please allow adequate time for product delivery, up to a week in most cases. In addition, please read the label as antibody protection may take up to a month or more to develop, depending on vaccine type.

The lack of background exposure to Botulism also means that only yearly vaccines use is suitable for stock in our area. The longer lasting three yearly vaccines are for Nth Qld endemic type situations where stock have background exposure throughout the year boosting their antibody protection. In our district stock are only exposed to botulism when seasonal risk factors converge.

For dairy producers please be aware that some of the single shot Botulism vaccines, while very effective and generally provide a higher antibody protection than the two shot Botulism vaccines will most likely create a drop in milk production of a couple of days duration, in most cases. It is worthwhile seeking advice on which vaccine is best for your situation and your stock".

Further information on botulism here **Botulism in cattle (nsw.gov.au)**

Leptospirosis - flood Waters, Rodents and contaminated feed risk

Leptospirosis is an infectious disease of domestic and wild animals that can infect humans causing serious illness. It is caused by the bacteria Leptospira which is most common in hot and humid areas. Rodents act as a reservoir for the bacteria and can expose livestock and humans to the disease. Infected rodents will shed the bacteria into the environment, feed and water. The infected rodent can shed the bacteria for long periods of time and the bacteria can survive in the environment for an extended period of time while remaining infectious. In order to minimise the risk to livestock and human's, rodent eradication programs should be in place in order to minimise numbers and potential for environmental contamination. Damp dark areas are where the bacteria are most likely to persist in the environment. As leptospirosis concentrates in the kidneys and female reproductive tract infected livestock may in turn affect others through their urine. Signs of infection in animals include abortions and, in some cases, clinical signs consistent with kidney infection. However, animals can also be infected and shed the organism, without showing clinical signs, which poses a human health risk. Most humans become infected through contact with the urine or birthing fluids of infected animals. There is an effective vaccine available against leptospirosis that can be used in cattle and sheep to minimise the chance of infection to both the animals and humans. If a leptospirosis infection is suspected in your herd your local veterinarian should be contacted. If you or another human has been exposed to potentially infected livestock and begins to show any signs of illness, they should consult a doctor immediately. For further information on leptospirosis contact your local Local Land Services office or private veterinarian.

WORM ALERT FOR SHEEP AND GOATS: INCREASE IN SCOUR WORMS

The present warm, humid conditions and abundant pasture favour the survival of worm eggs and worm larvae in our paddocks. It is therefore not surprising that significant (even fatal) burdens of gut worms have been occurring in sheep and goats during the last 6 months. However, there has been a noticeable change in the distribution of worm species reported in worm test[1] results throughout the Hunter region.

For a number of years, Haemonchus contortus (Barbers Pole worm: BPW) has been the dominant worm species throughout our region, often responsible for > 90% of worm eggs detected in many worm tests. BPW is a blood sucker and does not typically cause diarrhoea (scouring) in sheep or goats. It causes anaemia, and affected animals can be diagnosed by assessing the pallor (paleness) of their mucous membranes, and by their lethargy and intolerance of exercise. BPW remains the most common cause of death in sheep and goats in the Hunter region.

In recent months, however, it has been noticeable from worm test results that scour worms (i.e. those which cause diarrhoea), particularly the intestinal worm Trichostrongylus (Black Scour Worm), presently represent a significant portion of the worm burden in local sheep and goats. Affected animals are showing noticeable diarrhoea as well as the BPW-induced anaemia. Although this increase in scour worm burdens is no doubt assisted by favourable environmental conditions, it may also indicate that Trichostrongylus is becoming increasingly resistant to the commonly used drenches. In order that we can investigate that possibility, it is important that those submitting facecal samples for worm testing remember to complete the drenching history section of the submission form.

[1] A worm test involves collection of faeces (manure) from 10 or 15 animals in a flock and counting the number of worm eggs per gram of faeces. In order to identify the species of worms which have produced those eggs, it is necessary to hatch those eggs. This process is called 'larval differentiation' and takes an extra 7-10 days after the eggs have been counted. Larval differentiation is an important part of the worm-testing process, because it isn't possible to assess the significance of an egg count without knowing the species of worms involved, as different species produce vastly different numbers of eggs. Please follow this link to obtain a guide to interpretation of worm test results: **WormTest for livestock and guide to egg counts (nsw.gov.au)**

For more information on worm testing and drench selection, please contact your private vet or Local Land Services District Veterinarian. Our contact numbers are featured on the last page of this newsletter.

RODENTS AND PIGS

Rodents can spread disease and they have the ability to infect pigs with several different diseases, such as leptospirosis, salmonellosis, swine dysentery, toxoplasmosis, erysipelas and encephalomyocarditis (EMC). They can also affect the health and growth of the pigs and can affect people as well, making them quite unwell. During the current climatic conditions that we are experiencing in the Hunter, many areas are experiencing a rodent plague. Both mice and rats are being seen in huge numbers that most people do not recall seeing over the past 20 or 30 years.

Controlling rodents, whether they are in an intensive indoor piggery, free range or you just have a couple of pigs in the backyard, presents many challenges and you cannot rely on baits alone.

Effective rodent control management can only be obtained if the food and water supply the rodents are accessing is reduced, the rodents' shelter is reduced, and you maintain ongoing monitoring and surveillance.

You must implement an integrated approach for successful rodent control.

This includes:

1. Prevention and hygiene
2. Monitoring
3. Non-chemical solutions
4. Chemical solutions (baiting)
5. On-going monitoring

Any rodenticide products you use must be prescribed for agricultural production systems. All instructions must be strictly followed, including those for protective clothing. Remember that all rodenticides are sufficiently toxic to cause death to pigs (and other household pets, such as cats and dogs) and that pigs may feed on rodent carcasses. Therefore, all rodent carcasses must be disposed of properly to ensure that pigs don't consume them.

It is essential to reduce the places where rodents can shelter. Prevent clutter in and around buildings. Ensure all feed is stored in rodent-proof containers. If rodents can't hide or nest, your place will not seem as attractive to them. Cover all feeders with tight-fitting lids. Avoid feed contamination with rodent urine or faeces. Clean up any food spills promptly and thoroughly.

Bait stations should be kept outside sheds to control rodents and prevent surviving rodents from breeding. Baits (including locked bait stations) should NOT be placed in pig sheds, or areas that pigs have access. Use tamper-proof commercial bait stations, where the bait is secured within the station and cannot be removed. The bait station itself must be secured using rodent-proof material, such as chain. Ongoing surveillance is essential to maintain rodent control.

Australian Pork Limited (APL) has produced an Industry Rodenticide Stewardship Plan, which covers in detail how to implement a control program. It includes effective non-chemical strategies and the chemical approaches available to Australian pig producers. The Plan can be found on the APL website (in the Biosecurity Section).

In Australia, we often see a rise in the number of cases of Encephalomyocarditis Virus (EMCV) infection in pigs during mouse plagues. Rodents are the principal reservoirs of this virus and pigs are the domestic animal most susceptible to clinical disease by EMCV infection.

Infected rodents excrete the virus in their faeces and urine. Contaminated feed, water and bedding are the most common sources of infection. Feed contaminated by infected carcasses may contain high doses of the virus.

EMCV infection in young pigs is most commonly seen as sudden death due to heart failure. Infection in grower pigs is usually subclinical. In breeding females, there might be reproductive problems, such as abortions, stillbirths and mummified foetuses.

There is no treatment, but mortality might be minimized by avoiding stress and excitement of the pigs at risk.

Be vigilant! EMCV has already been confirmed in two separate piggeries in NSW.

FOOTROT IN SHEEP AND GOATS

Footrot is a contagious bacterial disease of both sheep and goats, caused by a combination of two bacterium; Dichelobacter nodosus (introduced by carrier animals) and Fusobacterium necrophorum (common bacteria in the soil). The two bacteria work together synergistically to destroy the hoof and sole of the small ruminant's foot and cause extreme lameness.

Footrot can remain in the foot unnoticed for years, until the environmental conditions are ideal for expression of the disease. The ideal conditions are:

- Average daily temperature of 10C or higher for 4-5 days
- Adequate moisture in the environment
- Adequate pasture length

Footrot will not spread during hot dry weather condition

As you can see, the current weather conditions are ideal for the expression and spread of footrot.

The lesions start in the interdigital space between the toes, where you would see reddening, hair loss and moisture. The soft inner horn of the hoof then becomes under-run, and the infection moves across the sole from the heel, extending to the outside hoof wall and progressing up to the toe. In severe footrot cases there will be extensive inflammation and under-running of the hard horn of the hoof. Footrot will usually affect more than one foot and often has a putrid smell. Footrot is a whole herd problem.

Virulent Footrot is a notifiable disease which requires a person to notify an authorised officer (eg District Vet LLS) under the *Biosecurity Act 2015* after they suspect or become aware of footrot in sheep and goats. Regulatory action may result, if virulent footrot is not promptly notified. Once footrot is diagnosed or suspected on a property, a District Veterinarian will place the property under a Biosecurity Direction to prevent movement of these infected animals off the property without a permit from an authorised officer and develop an eradication program to rid the property of disease (footrot).

It is especially important to ensure that any introduced sheep /goats come from a clean property and that the owners of the sheep/goats are willing to provide a signed National Sheep/Goat Health Declaration before you take delivery of the animals. Ideally, go to the vendors property and have a look at their flock/herd to ensure there is no sign of illness/ lameness and recheck on arrival. Quarantine any new animals, checking for any signs of illness and/or lameness. Maintain strict farm biosecurity, with well-maintained fences to prevent straying stock.

When you are purchasing sheep and goats, they require a National Vendor Declaration, NLIS ear tag in their ear and you will need to transfer the stock on the NLIS Database onto your Property Identification Code. It is also recommended that you ask for a National Sheep/Goat Health Declaration form that you can find at the Farm Biosecurity web site **https://www.farmbiosecurity.com.au/toolkit/declarations-and-statements/**

The last thing you want to do is purchase a few sheep or goats to eat your grass and weeds down and end up with a property under quarantine with virulent footrot!

PROTECT YOUR DOG FROM EHRLICHIA CANIS

NSW Department of Primary Industries (NSW DPI) is advising dog owners to be alert, notalarmed, after the detection of ticks carrying the disease Ehrlichiosis in South Australia.

Ehrlichiosis is a disease spread by the brown dog tick. It primarily affects dogs and can befatal if not properly treated.

Acting NSW Chief Veterinary Officer, Paul Freeman, said Ehrlichia canis (E. canis) is spread bythe brown dog tick and it cannot be passed directly from dog to dog.

"If dogs are being treated and/or have tick prevention then the risk of spread is very low,"said Mr Freeman.

"E. Canis has not been detected in any NSW origin dogs but several dogs which werebrought into NSW from the Northern Territory were diagnosed as positive to E. canis and are undergoing veterinary treatment."

NSW DPI is focusing on raising awareness and the education of pet owners, vets andshelters to ensure they are aware of the clinical signs and actions required. Thedepartment supports the testing of dogs and provides technical advice.

"NSW has a surveillance plan which includes testing dogs with clinical signs consistent with E. Canis and targeted surveillance, including retrospectively testing historical samples. Todate, results from all these tests have been negative," said Mr Freeman.

"People moving or bringing dogs from interstate or adopting rescue dogs should askquestions about where the animals came from and what tick prevention they have.

"Every person bringing dogs into NSW has a general biosecurity duty to ensure as far as isreasonably practicable the biosecurity risk of bringing E. canis into NSW is prevented,eliminated or minimised."

Dogs which have been diagnosed and are undergoing veterinary treatment for ehrlichiosisdo not pose a health risk in transferring the disease to other dogs.

Infection with E. canis is a notifiable disease in Australia. If you suspect ehrlichiosis in anydog in NSW, call the **Emergency Animal Disease hotline on 1800 675 888.**

Canine-Ehrlichiosis in Western Australia and the Northern Territory

May 2020, an exotic tick-borne disease was found in a number of dogs in Western Australia in the far north Kimberley region. This disease is called Ehrlichiosis, which is a bacterial illness (Ehrlichia canis) transmitted by the brown dog tick. This disease had only ever been detected in Australia in imported dogs before, but this time the dogs were local dogs that had not been imported. The disease is spread by infected tick bites, where the bacteria passes into the dog's bloodstream. Dogs cannot transmit the disease to each other, it is transmitted by the brown dog tick (*Rhipicephalus sanguineous*). On rare occasions the tick may transmit the bacterial disease to humans, so, if you become ill after being bitten by a tick you should see your Doctor as soon as possible.

Dogs will present with flu-like symptoms, fever, lethargy, enlarged lymph nodes, loss of appetite, weight loss and bleeding disorders. If left untreated, ehrlichiosis can be fatal to dogs. Dogs can be treated with antibiotics and supportive care; these animals are normally anaemic and need time to recover and rest. Most dogs respond well to treatment but some develop a chronic infection which may be terminal.E.canis

Since the initial detection in May 2020, there have been more than 300 dogs in WA and NT that have now tested positive and many reports of dogs dying without being tested but clinical symptoms highly suspicious of the disease. Once it is in the tick population it is difficult to control, infected ticks have even been detected in SA. Ehrlichiosis is a nationally notifiable disease, so anyone who suspects their dog has the disease should contact their private veterinarian, Local Land Services District Veterinarian or the Emergency Disease **Hotline 1800 675 888.**

Tick prevention is the key to preventing ehrlichiosis in dogs. Most people in the Hunter have their dogs on a tick control program and inspect their dogs regularly for ticks, because of the issue we have with paralysis ticks. It is particularly important to consider ehrlichiosis if you are travelling with your dog, especially to tropical and sub-tropical regions where the brown dog tick numbers tend to be greatest. Every person bringing dogs into NSW has a general biosecurity duty to ensure as far as is reasonably practicable the biosecurity risk of bringing E canis into NSW is prevented, eliminated or minimised.

If your dog becomes sick while travelling or when you get home, inform your private veterinarian where you have been. To diagnose ehrlichiosis in dogs, your veterinarian will take a blood sample from your dog. Prompt early treatment with antibiotics and supportive care is essential to provide the best chance of recovery.

LOW STRESS STOCK HANDLING

DON'T WAIT A SINGLE MINUTE!

As Anne Frank once wrote, "How wonderful it is that nobody need wait a single moment before starting to improve the world"

When I met Bud Williams in 1999, I knew stockmanship was what could change everything for both livestock and their handlers. It changed the way we thought about our livestock and the way we worked with them in both the paddock and the yards, which at the time was a 40,000-acre sheep and cattle station in western NSW.

The surprise for us was how it changed the people working in our business, no longer were they frustrated with the livestock or each other. Everyone looked forward to a day mustering or working in the yards.

Most of us run livestock as a business and wish to maximise the profit we make from them. Over the last 20 years I have seen Low Stress Stockhandling lead to increased production and profitability with both sheep and cattle.

Increasing weight gain by just 0.1kg a day could put an extra (a)$150/head per year in your pocket, reducing shrink on transport or at the sale yards by 2% (b)$45/head or putting on an extra 20kg in the month of weaning is worth $110/head in your pocket. All profit without any inputs!!

(Based on average weight gain of 0.7/day increased to 0.8/day, so 37kg/year increased weigh valued at $4.50/kg ~ (b) Based on 500kg full weight at $4.50/kg ~ (c) Based on weaning weight of 260kg at $5.50/kg.)

Often times we have cause to move our animals to safety in an emergency such as a bushfire, flood or a disease outbreak. This is already a stressful time for us, yet we can effectively and efficiently move animals to safety, while keeping ourselves safe as well. Lyndell Stone, Hunter Local Land Services District Vet identified, after the 2019 bushfires many farmers in the region could benefit from being able to move animals quickly, safely and effectively in times of emergency.

I have had the privilege of sharing the Low Stress Stock Handling principles at six recent workshops in the Mid Coast area during the first half of 2021. I know this is the start of creating a culture and environment where the farmers and the animals are able to improve welfare for everyone.

The two-day school teaches the seven principles of Low Stress Stock Handling with both theory and practical hands-on sessions.

Everyone no matter their experience will go home with a new outlook and the skill to muster and work their livestock in the yards in a safe and efficient way.

Are you going to wait a single moment before starting to improve your livestock handling skills and knowledge?

Graham Rees.

Note from HLLS: We have one remaining LSSH schools on offer, heavily subsidized through Bushfire Recovery funds. Please contact your local DV to register your interest.

Next Mid Coast is 19/20 July at Bunya.
Please email lyndell.stone@lls.nsw.gov.au

By positioning ourselves where the animals want us to be, we can move our animals through our system safely and effectively. Low Stress Stockhandling is quicker and easier whilst allowing the livestock to reach their full production potential.

HLLS works with Women in Dairy to assist the next generation of farm workers. Here Graham helps Monique and Rosie at the first LSSH school at Lansdowne in February 2021. 18 young farm workers attended the session and left the school incredibly motivated to continue with their LSSH and cattle education.

FAILURE TO VACCINATE COSTING HUNTER CATTLE PRODUCERS

Hunter Local Land Services District Vets are urging local cattle producers to regularly vaccinate their stock, after a number of preventable deaths occurred in recent weeks.

The team have been called to undertake autopsies on several animals, with common causes of death including pulpy kidney and black leg.

District Vet Dr Kristi Arnot says with the current high value of cattle, these are avoidable losses if producers maintain a regular vaccination schedule.

"A five-in-one vaccine costs less than one dollar per animal, it's a cheap insurance policy no matter whether you are protecting a young calf, heavy steer or stud animal," said Kristi.

"Every time you are planning to move stock onto different feed, if you are moving them to a different property or you have bought stock in from another area, vaccinate.

"You can vaccinate them every three months and I highly recommend all producers maintain a regular vaccination program to protect against losses from these common illnesses."

Similarly there are still losses occurring from nitrate poisoning when producers have brought new stock into the Hunter who are not used to our high-nitrate area, or introduced new feed.

"Hunter Local Land Services is still offering free feed testing, which has been part of our drought support initiatives, to ensure producers have peace of mind before feeding out new fodder or transferring stock onto new pastures," says Kristi.

"It really is essential to be aware of the nitrate poisoning, because following autumn rain, landholders need to take extra care when shifting livestock onto green feed."

Nitrate poisoning is caused by high nitrate levels in feed and it usually occurs in late autumn or winter, particularly during a flush of growth after rain. Livestock that graze on lush green feed and weeds high in nitrate can die suddenly.

"Simple steps can be made to protect these valuable stock from avoidable deaths, regular vaccination schedules and feed testing are just two examples of basic livestock management," said Kristi.

"If you have concerns about the health or welfare of your stock, or managing pastures you can contact our team on 1300 795 299."

LPA NVD and NLIS News

Check your Saleyard Point of sale document is a compliant transport document

When purchasing cattle at a saleyard, producers often rely on saleyard Point of Sale documents as being compliant Transported Stock Statement/Waybills. This may or may not the case and it is best to check with your saleyard before transporting stock.

Many saleyard operators are in the process of updating their software so that their Saleyard Outward Movement Records (SOMR) are TSS/Waybill compliant, but the update is not yet complete across the state. It may be prudent to have LLS TSSs on hand until the changeover is complete, just in case. TSS are available from your nearest LSS office.

Consigning livestock correctly on your LPA NVD

It is important to know how to correctly complete the 'consigned to' and 'destination' sections of the hard copy NVD and eNVD when transporting livestock. Sometimes the consignee and the destination are different with different PICs. It is important that you identify this on the LPA NVD. The following advice from ISC Ltd should help.

- When transporting livestock to be sold at a saleyard, the consignee is the agent, but the destination and destination PIC is the saleyard location.
- When the consignee and destination details are different, the full address for both must be completed and the destination PIC (not mandatory in NSWO must be for the actual destination the livestock are being transported to.

Producers should remember the LPA **National Vendor Declaration** (NVD) is a signed, legal document that guarantees the safety of red meat products and enables the traceability of those products along each link in the value chain.

Incorrectly completed NVDs can be recorded as a non-conformance with the LPA program and may lead to suspension from the LPA program.

See Consigning livestock correctly on your LPA NVD | Integrity Systems

Extension of ISC customer service hours

ISC customer service is now open longer to assist producers Monday to Friday from 8am to 7pm AEST . This is a three hour extension of customer service hours.

Producers can also access some services through a self service function 24 hours a day to

- Order NVD Books
- Reset Passwords for LPA and NLIS accounts
- Recover their LPA user ID.
- Learn how to complete an eNVD.

If you want to use this self service function you must ensure the phone line you are using to access the help desk is the mobile or landline number listed in your LPA account. **Login - LPA Service Centre (nlis.com.au)**

HERE'S HOW TO CONTACT YOUR DISTRICT VET:

Jim Kerr – Tocal
0439 185 275

Kylie Greentree – Maitland
0428 498 687

Kristi Arnot – Singleton
0409 758 823

Lyndell Stone – Wingham
0429 532 855

Lisa Goodchild – Scone
0427 322 311

FOR MORE INFORMATION ABOUT HUNTER LOCAL LAND SERVICES:

1300 795 299

admin.hunter@lls.nsw.gov.au

www.lls.nsw.gov.au/regions/hunter

www.facebook.com.HunterLLS

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