Rosevean
VETERINARY PRACTICE

Farm Newsletter

Summer 2023

Controlling BVD in your beef herd

There is now real impetus throughout the UK for nationwide eradication of Bovine Viral Diarrhoea (BVD). This has additionally been demonstrated with the introduction of BVD testing in the new Animal Health and Welfare Review.

The ultimate objective of BVD-free status for the country may be some way off, but eradication of this damaging infectious disease within the confines of your own beef farm should be an achievable aim relatively quickly. The benefits for herds where the disease is present should be dramatic, with tangibly improved performance and reduced economic losses likely, whilst for those currently clear the incentives to remain so are equally significant.

BVD can be one of the biggest drains on beef herd profitability, with one diagnostic survey indicating the disease is present on nearly two-thirds of beef units, at a cost of around £46.50/cow/year1. Mucosal disease is one obvious clinical sign of infection, but this is often just the 'tip of the iceberg'.

The virus is more likely to result in reduced fertility through high levels of abortion and returns to service in the adult herd. Exposure also commonly causes immune suppression leading to increased levels of pneumonia, scours and depressed growth rates in calves.

Effective biosecurity is a must as the virus can spread very easily via nose-to-nose contact. The disease also moves from dam to her unborn calf, causing additional serious complications.

When a naive cow is exposed to the virus during the first 120 days of pregnancy, the calf may be born carrying and shedding the virus and is termed 'Persistently Infected' – a PI. These PIs are highly infectious and present one of the greatest risks of disease spread, though they may not themselves show any significant signs of illness. This is particularly important to bear in mind when buying in-calf cows as the mother may not pose a risk but the calf could.

Identifying PIs and culling them is the first step in any situation, followed by measures to prevent the disease entering the herd. Given the difficulty of maintaining biosecurity that is 100% effective, on-going vaccination against BVD is essential for many UK herds. Carried out correctly, vaccination will help protect cows from the effects of exposure to the BVD virus and significantly reduce the risk of a PI being produced. Due to the ease with which BVD is spread, vaccination is recommended for all beef breeding herds.

New testing methods are now available to make it easier to identify PIs, whether buying in stock or to check the status of your own breeding animals. Alongside good biosecurity protocols and the correct vaccination procedures, we can help you ensure your herd is BVD-free.

Contact for more information on BVD control, eradication and how to make the most of the free BVD testing available through the Animal Health and Welfare Review.

1 Yarnall and Thrusfield (2017), Vet Record 181(13)

In this edition...

vetPartners

Adder bites in livestock

On a warm Friday morning in July, a 5-year-old Simmental cow was presented with a sudden, dramatic swelling of the right face, extending from the eye down to the lower jaw. The animal was depressed, not feeding and had a high fever. She was out on grass with her calf, and was fine the day before. Clinical examination revealed two bleeding puncture wounds in the upper eyelid, indicative of an adder bite.

Adders (Viper berus) are the only venomous snake found at heathland, moorland and woodland edges across Britain. Non-aggressive and well camouflaged, adders are clearly recognisable by a dark zigzagging line down their back, and a 'V' or 'X' shaped marking on the head.

Although rare, several cases of adder bites in livestock are seen each year between April and October, with a marked peak in July and August. In ruminants, most bites occur in the face when the snake is accidentally disturbed, but they are also seen on the udder, tongue, or limbs.

In most cases, animals only develop a minor or local reaction. However, adder bites can potentially lead to severe clinical signs, requiring immediate veterinary attention. Adder venom is a mixture of toxins, that is delivered deep into the tissue by needle-like fangs. This causes enormous damage to blood vessels, with subsequent swelling and loss of skin and underlying tissue. When this occurs in the face, rapid breathing and drooling occur. The sudden and extensive reaction to the bite can cause fever and depression in the animal. In exceptional cases, an anaphylactic shock to the venom leads to death.

Treatment needs to be prompt and is targeted at limiting the damage caused by the venomous toxins. Anti-inflammatories are given to reduce swelling and pain, and antibiotics can cure any secondary bacterial infections caused by tissue necrosis.

Due to quick action of the farmer, the Simmental cow made a full recovery. It is worth keeping an extra close eye on grazing livestock at risk during the summer months.

In this edition...

A quarter of UK dairy farms sampled are responsible for 49% of the sector's total antimicrobial use.

The latest Antimicrobial Focus Report from Kingshay shows a quarter of UK dairy farmers from those sampled are responsible for 49% of total antibiotic usage in the sector.

The report, which is now in its second year, draws on data from 1,044 dairy herds across the UK in the 12 months to March 2022.

It shows that individual herd antimicrobial use ranged from 0.26 to 87.17 mg/kg PCU, however average total antimicrobial usage for the year was 15.9 mg/kg PCU.

This is up slightly on the previous year's figure of 15.5 mg/kg PCU, but down from 21.7 mg/kg PCU in 2018.

Encouragingly the report shows more than two-thirds of herds – 69% – were using less antimicrobials than Kingshay's benchmarking target of 17.9 mg/kg PCU.

The target has been calculated by Kingshay based on a 15% reduction of RUMA's (Responsible Use of Medicines in Agriculture Alliance) 2020 target of 21 mg/kg PCU.

According to the report, if the highest 25% of antimicrobial users cut their usage by one third, overall average herd usage across the board would reduce to 13.3 mg/kg PCU and 79% of herds would then fall below the 2024 usage target of 17.9 mg/kg PCU. These findings highlight the need for a more bespoke approach to reducing antimicrobial use on farms with a high usage. Early wins have been made in terms of refining antimicrobial usage on the majority of farms but continued effort and further changes are required to reduce the usage further. We can do this by targeting specific high use areas on farm such as drying off and mastitis intervention – this can be an area we can address during your Animal Health and Welfare Review.

The report also highlights that injectables remain the most used antimicrobial route of administration on dairy farms – highlighting an area for improvement going forward. They account for between 70 and 76% of usage, irrespective of whether the farm is a high or low users of antimicrobials.

In general, these are used for sick cow management so there's real value in regularly reviewing treatment protocols with your vet. Regular reviews can help identify potential management changes such as improvements to buildings, disinfection protocols and nutrition or the introduction of vaccination programmes that could help reduce the need for antimicrobial treatments in the first place.

The 2022 annual Antimicrobial Focus Report can be accessed via the Kingshay website: https://www.kingshay.com/news/kingshay-antimicrobial-focus-report-2022/

In this edition...

Plan ahead to prevent Toxoplasmosis

If you keep sheep they've more than likely been exposed to the parasite that causes toxoplasmosis and aim to protect ewes well before they go to the ram later this year.

Toxoplasma gondii is now the world's most common parasite and it's been estimated that over 90% of sheep flocks in Great Britain are exposed to it1. If you are not already vaccinating against toxoplasmosis it's probably only a matter of time before new ewes are exposed to an infection, so you should plan ahead accordingly.

Certainly, if you had more than 3% of your flock aborting during the lambing season you should ask us to investigate. Now is the time to work out what caused this year's problems with a view to avoiding similar next year. Your primary focus should be on preventing infection in pregnant ewes in the first place, and the best way to do that is to vaccinate replacement ewes well before they go to the ram.

The complex Toxoplasma gondii parasite lifecycle presents significant disease management challenges to sheep producers. The sheer volume of infectious eggs produced by the parasite and their resistance to destruction leads to widespread environmental contamination: this is one of the main reasons why toxoplasmosis is so prevalent in GB flocks.

Sheep are very vulnerable to picking up the Toxoplasma parasite from the environment, so normal biosecurity measures are not enough to control the disease. Fortunately, toxoplasmosis can be controlled effectively by a simple vaccination regime. What's more, an investment in vaccination should payback handsomely by a reduction in future flock barren and abortion rates. The clear industry advice now is that every ewe should have been vaccinated before it breeds. After two years, a single repeat dose can be given at least 3 weeks prior to mating. However, most ewes are only vaccinated once during a breeding lifetime as natural boosting occurs, so one dose may protect future lambing's.

All current and potential replacement ewes should be vaccinated any time between four months and three weeks before tupping. Immediately post lambing and up until the typical autumn breeding season there's a very wide window of opportunity to vaccinate most female breeding sheep against toxoplasmosis, so it makes sense to schedule this crucial intervention as soon as possible.

If you experienced a few abortions or weakly lambs during the lambing season, please contact us for advice and we can investigate.

For further information, please call the practice on 01736 362215.

1. Hutchinson J P et al, (2011): Survey to demonstrate the seroprevalence of Toxoplasma gondii infection in British sheep flocks. Veterinary Record 169:582

If you would like more information on what we've discussed in this month's newsletter, please speak to any of our farm veterinary team.

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