

November 2024

## Neosporosis in Cattle



One of the most common causes of abortion in cattle is a protozoan parasite called *Neospora caninum*. Animals that are infected with *Neospora* are infected for life.

Cattle are infected either by in utero transmission, where a cow that is infected with *neosporea* (either from her own mother or from new infection during the pregnancy) will transmit the infection to her calf in the womb and the calf will be born infected with *neosporea*, as will the calf's future offspring. Cattle are initially infected when they graze areas or are fed rations from an area that have dog or fox faecal contamination. Dogs and foxes become infected after eating the tissues (e.g. placenta or carcasses) of infected animals.

Clinical signs of *neosporea* are abortion (usually late stage between 5-7 months gestation), stillborn calves and unexpectedly poor fertility rates/high barren rates.

*Neosporea* can be subclinical – not all infected cows will abort every pregnancy. Infected cows are much more likely to abort a pregnancy, but subsequently they can hold a normal pregnancy to term. Therefore *neosporea* can often be a 'silent' disease on farm – building and building through the herd down family lines whilst farmers are none the wiser. Or, if naïve cows are unknowingly fed a contaminated ration, there could be an abortion storm, with many cows aborting due to mid pregnancy infection with *Neosporea*.

Testing for *neosporea* can be done via a blood or milk test. Cows can be tested after they have aborted, or they can be tested with the rest of the herd. Many dairy farms routinely screen every cow for *neosporea* via a milk test at dry off. Positive cows will always be positive so do not need to be tested again but a negative cow should be tested every year. Talk to one of the vets for the best way to test specifically on your farm.

If a cow is positive, it does not mean they must be culled from the herd instantly. However, it must be accepted that the cow will likely have a poorer fertility than an uninfected cow. Infected cows can still get in calf and hold a pregnancy to term. It is absolutely critical that a calf born from a *neosporea* positive cow is NOT retained in the herd for breeding, as these calves will also be positive. *Neosporea* cows should be bred to beef and none of their offspring kept in the herd for breeding.

Prevention of spread from dogs to cattle can be reduced by keeping dogs away from cattle feed and water sources, and keeping good standards of hygiene at calving. Specifically, preventing dogs eating placenta and aborted or dead calves.

It is really important that disease status is established in individual cows to prevent infection being spread through the herd from cow to calf. Speak to one of our vets to discuss risk on your farm, as well as testing costs. Funding is available via the Animal Health and Welfare Pathway.

### Smallholders Day

We are holding a practical smallholders day on Wednesday 27th November 2024 from 10.30am til 3pm.

A morning session will be held in a village hall focusing on general husbandry, nutrition, medicines usage, lameness, parasites and much more, followed by lunch.

An on farm practical session will follow in the afternoon focusing on medicines administration, lambing/kidding, handling and anything else that you would like covered.

Tickets are £50 per person, with discounts for smallholder club members and 2nd attendees.



The eagle eyed amongst you may have noticed that at Brailsford Ploughing Match we were supported by team members from the Farming Community Network (FCN). The FCN are a charity organisation that provide support and advice for farmers at any time. They have local volunteers (such as those at the ploughing match) who are on hand to listen to any concerns farmers may have, such as livestock welfare and management, financial issues, succession problems and many more areas. The volunteers can help liaise with animal health authorities, the RPA, banks, vets, or help with paperwork. We encourage anyone who feels they need a listening ear or practical help to get in touch with the FCN. In addition, you can contact the FCN if you would like to volunteer, donate or find out more about what important work this organisation do.

**HELPLINE: 03000 111 999**

## New advances in navel care: improved protection of your calves and lambs

As a practice, keeping informed of new developments and research that can ensure we offer you the best evidence-based advice is important to us. As we start to look ahead to the lambing and calving seasons, we're considering what else our clients can do to protect their youngstock.

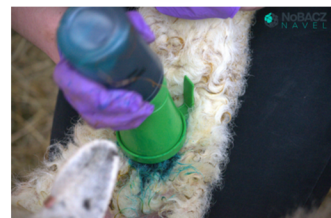
Until now best practice has been to apply 'strong iodine' to the umbilicus, and sometimes ear-tagging sites. Dipping (using a non-return dip cup) offers the best coverage of the navel. The aim is to provide desiccation of the umbilicus and disinfection of the surface. As an industry we've all worked hard to move away from blanket antibiotic use at lambing and spraying antibiotics onto the navel. Interestingly, there is little published evidence for a reduction in mortality rates using iodine as a preventative approach. Many of you often report that it is licked off (especially in male lambs and calves), drips off, and that re-applications are required.

As you'll all remember, in 2022, the iodine supply was limited and prices quadrupled (if you could get it!). In response to this, NoBACZ Healthcare developed a liquid solution containing a proprietary blend of shellac and metal salts in an ethanol base (NoBACZ Navel). It provides greater desiccation (drying out) of the umbilicus than iodine or chlorhexidine (with or without spirit), and 360° protection by forming a non-colonizable hydrophobic barrier – protecting the lamb from the environment. Uniquely, it also contains a bitter agent making it lick-resistant so that cows or ewes won't interfere and lick it off the navel.

Throughout the last lambing season Flock Health Ltd ran a randomized control trial with 6840 lambs involved (half having their navels and ear-tagging sites doses with strong iodine compared with half dosed with NoBACZ Navel).

**NoBACZ navel demonstrated superior protection compared with iodine in the study.** Evidenced by the **21% reduction in mortality** that was observed in the NoBACZ navel group compared with the iodine group. The study also showed a clear benefit in spraying the ear before tagging.

For lambs, producers should target eight-week weights more than 20 kg. In the study, lambs that had NoBACZ navel applied to the navel and tagging sites were more than 230 g heavier than their iodine group counterparts at eight weeks. To us, NoBACZ navel will benefit our clients by offering greater protection and significant economic returns: **3.4 more lambs alive per 200 born, and an average of 230 g extra bodyweight (per lamb) at eight weeks, more than justifies the decision to put NoBACZ navel in your lambing or calving kit!**



## PRE-HOUSING VACCINATIONS

A quick reminder that as we head into the winter months and most of our animals are housed once again, to think ahead for your pneumonia vaccination protocols. Many of the vaccines, such as **Bovalto Respi 3 or 4**, require a primary course of 2 injections before the animals have full immunity from the vaccinations.

Where possible these should be completed **prior** to the risk period of housing. Following the primary course the animals gain immunity for 6 months.

