

THREE RIVERS VETERINARY GROUP

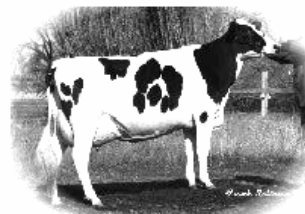
FARM ANIMAL PRACTICE

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CATTLE PRACTICE

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This main subject for this newsletter is pneumonia, its causes and prevention. As we approach the high risk season for pneumonia it is a good time to reassess the main risk factors and causes of this important and costly disease. The estimates of the cost of pneumonia to the UK livestock industry vary between £60 – 80 million per year.

Getting the Ventilation Right.

Getting the ventilation right in calf and beef rearing sheds is one of the most important parts of the jigsaw in pneumonia prevention.

Poor ventilation in livestock housing leads to dampness and condensation – this presents a serious health risk to your stock. In particular, calves are at risk from airborne moisture and also from wet bedding and pools of water.

Livestock give off a huge amount of heat from their bodies; they also expel large amounts of moisture in their breath. If there are insufficient air outlets high up or the building does not have an open ridge the warm humid air around the calves which is dense with bacteria and viruses rises but cannot get away. Instead it condenses on the cold roof and water then drips back into the building thereby increasing the humidity and the ventilation problems.

If you get the ventilation right there should be plenty of fresh air entering the building through inlets above the backs of the cattle which circulates around them. As this air is warmed it rises and must escape through higher outlets– naturally drawing in more fresh air through the inlet in its wake. This rising warm air must be allowed to escape

through outlets high in the building and ideally an open ridge in the roof.

What causes pneumonia?

Calf pneumonia is caused by many factors which include: too high stocking rates, poor ventilation, circulating viruses and bacteria, as well as management factors such as calf colostrum intake, mixing and stress.

• Housing.

Good ventilation is essential, as discussed in the previous section. As a general ‘rule of thumb’, there should be an air inlet of at least 0.05 square metres per calf, and an outlet of at least 4 times this size.

Stocking rates should ensure that, for animals up to 150kg, each has at least 13 cubic metres of space and 2 square metres of lying area.

• Viruses and Bacteria.

Parainfluenza type 3 virus (PI3) and Respiratory Syncytial virus (RSV) and Infectious Bovine Rhinotracheitis (IBR) are both often present and cause disease in calves, particularly if mixed with or housed near to older animals.

On many farms a further complication is the presence of Bovine Viral Diarrhoea Virus (BVDV). This virus reduces the strength of the animals’ immune system and results in:

- The cattle become more susceptible to pneumonia.

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- More severe disease.
- A longer period of convalesce.

Histophilus somnus is a bacterium that causes pneumonia in young calves and it seems to be increasing in incidence. It is also known as 'sleepy calf disease' because it causes the calves to become lethargic and loose weight with a low grade cough. Often treatment is delayed because the calves don't appear as ill as they actually are and then they suddenly start to deteriorate and die.

Mannhaemia haemolytica is a bacterium that commonly lives in the tonsils/throat of cattle, and can cause severe pneumonia if they are stressed or if viruses have already caused damage. Stress or transport allows the bacterium to cause shipping (or transit) fever, which is commonly seen in fattening stock a few days after transport stress. A number of other bacteria can also be involved, (including *Pasturella*).

Pasturella multocida is a bacterium that lives in the throat/tonsils of cattle and causes pneumonia either on the back of stress or another infective agent or virus.

Mycoplasma infections are difficult to treat and control and they have a very debilitating effect on the calves. In most cases mass medication of all the calves on the unit has to be used.

• **Management factors.**

Poor colostrum intake, mixing of groups, stress and concurrent disease e.g. scours, can all lead to an increased risk of pneumonia. These factors can all result in the immune system being less able to cope when viruses or bacteria are circulating.

How can I best control pneumonia?

When disease occurs, it can be very helpful to try and find out which viruses or bacteria are involved and this is most easily done with some convalescent blood samples from calves that were affected 3 – 4 weeks previously. These cattle will have antibodies in their system from fighting the organism and we can test for this. So:

1. Establish which organisms are causing the pneumonia.
2. Treatment of affected calves. Antibiotics plus anti-inflammatory are used.
3. Early in the outbreak it may be possible to isolate the affected calves. This helps to reduce the total number of calves affected.

4. Minimise stress. Ensure good feeding, no mixing or transporting to help reduce the extent of the outbreak.

5. Any quick measures which can be implemented to improve the ventilation or stocking density of the housing should also be considered.

6. Make an assessment of ventilation, stocking rates etc and make long term improvements.

How can I best prevent pneumonia?

Addressing any problems with housing and management of calves can go a long way to prevent outbreaks. In addition to this, vaccination can be a very effective preventative tool.

Some of the most common and important viruses and bacteria that cause pneumonia in calves can be prevented from the large range of vaccines now available.

NEW - Closamectin Pour-On.

Parasite treatments can now all be done in a single Pour-on!!!

- Lungworm.
- Gastro-intestinal worms.
- Liver Fluke.
- Mites/Lice.

There has been a big rush for this product and the manufacturers are having difficulty providing stock.

Our advice is to order early as there may be a wait.

Dose rate - 1ml per 10 Kg body weight.

1 litre: £119.84 + Vat (no gun needed).

2.5 Litre: £210.94 + Vat.

5 Litre: £418.95 + Vat.

Gun: £16.05 +Vat.

Ivermectin Pour-On Wormer .

For lungworm and gut worms:

2.5 litres Enovex at £46.09 + VAT!!!

If you don't have a gun we can provide one for £20.32 +VAT.

Trodax Injection – Offer Pack.

Treats liver fluke only – can be used with pour- on wormer.

The pack contains 2x500ml which contains enough for 66 x 500kg cattle (or 111 x 300 Kg) - **£142.28+vat.**