



Winter Housing – Protect from Pneumonia

As with all diseases prevention is far better than cure and in the case of pneumonia the impact lasts well into adulthood affecting lung capacity and compromising performance – a very costly mistake.

“Why bother? We only treated a few last year” “It wasn’t that bad and they all got over it”

Pneumonia has a low mortality/death (3%) but is highly infectious often affecting over 50% of groups – this means cases appear to be resolved but.....

Cost of Pneumonia Case per Calf

	Beef Calf	Dairy Calf
Per Ill Animal	£82	£43 up to £63
Per Normal Animal in Affected Group	£74	£30

The cost of pneumonia is so much more than the cost of lost calves, drugs, repeat treatments or having calves examined – one of the major costs is the lack of weight gain in entire groups (often half the target level) impacting future yield, fertility and longevity. With the current weighing programme under way we are already seeing the impacts on live weight gain across farms.

What causes Pneumonia?

Viruses: RSV, PI3 and IBR, Bacteria: *Manhaemia haemolytica* (Pasturella), *Haemophilus somnus* and *Mycoplasma bovis* (as discussed in September newsletter) all cause pneumonia in calves. Lungworm can also cause respiratory signs in older animals at pasture. Although these are the organisms that cause infections, pneumonia only occurs when environmental factors and infectious organisms interact together to affect the incidence and severity of disease – this means there is masses we can do towards prevention.

Environmental factors include:

- Poor Immunity – colostrum volume, timing, hygiene and quality
- Mixing calves from different sources and ages
- Hygiene and drainage – feeding apparatus and housing hygiene, moisture in housing
- Sick calves within healthy groups not isolated
- Poorly designed buildings – exposure to drafts, poor ventilation, overstocking, extremes of temperature and shared air space between ages
- Inadequate nutrition – low milk intake and weaning changes
- Other diseases and castration/dehorning stresses

So how can we safeguard against problems?

Poor Nutrition: Inadequate colostrum and milk intake will dramatically reduce immunity to pneumonia pathogens. In the first 12 weeks of life, calves are dependent upon colostrum antibodies to fight off infection.

Mixing: Never mix calves from different sources/ age groups/ sick with healthy and be conscious of shared air space – different pens does not mean they are isolated!

Other Disease: Calves with scour are 3 times more likely to get pneumonia. If BVD is present in the herd it increases susceptibility to pneumonia.

Stresses: changes in groups, feeding, castration and dehorning all cause stress levels to rise. Try to minimise these stresses where possible.

Housing Design: Ensure the sheds are stocked correctly with ventilation that is appropriate. This means 6 changes of air space every hour but with solid partitions well over the height of calves.

Vaccination: Viruses cannot be killed by antibiotics but if appropriate vaccination can be used to minimise impact of disease. In the face of poor management, vaccination will have a limited impact and so investment needs to be into both vaccination and environment. Diagnosis of the on farm pathogens is key to select the correct vaccination programme. This can be done with 5 blood tests from calves over 12 weeks old.

Vaccine	Pasturella	IBR	RSV	PI ₃	BVD	Age of first vaccination	No. of doses	Cost /dose	Route	Length of Protection
Rispoval Intranasal	-	-	+	+	-	9 days	1	£7.37	I/N	9 weeks
Rispoval P	+	-	-	-	-	3 months	1	£4.74	I/M	17 weeks
Bovipast RSP	+	-	+	+	-	2 weeks	2	£6.22	S/C	
Bovilis IBR	-	+	-	-	-	3 months (4 weeks)	1 (2)	£2.77	I/N or I/M	6 months
Rispoval 4	-	+	+	+	+	3 weeks (>3 months)	2 (1)	£6.68	I/M	6 months

When considering vaccination please speak to us at the practice to help you navigate this minefield of information to ensure you see the most benefit from your investment into preventing pneumonia. Next month we will discuss how to accurately diagnose and treat pneumonia cases.

BVD - TAG AND TEST

Bovine Viral Diarrhoea (BVD) is a costly endemic disease throughout the UK. Large numbers of practice herds have utilised vaccination for many years to reduce the detrimental effects of this virus. As discussed above, it has impacts into reducing immunity across the herd.

However, the identification and removal of Persistently Infected (PI) animals is the ultimate method for BVD control and eradication.

Many of you now use the Tag and Test systems to identify these PI's from birth. This is an excellent system and we encourage everyone to consider its use. To get the best use from Tag and Test it is worth reconsidering some of the finer details:

- Most tests use a process called ELISA to identify virus in the ear notch. High temperatures can affect this test. Therefore always ensure you store the samples in a cool place (farm fridge) and post to the lab at no more than two week intervals. Tags should also be inserted as

soon as possible after birth (ideally by day 3).

- Don't forget dead calves, stillbirths and aborted fetuses. Keep a supply of management tags to use on these. Even though the carcasses will quickly leave, the farm positive results allow identification of suspect dams and speed up progress towards negative status.

Meetings

Dry Cow Therapy - Revisited

Wed 21st October

7 pm at the practice

This will be a vital and informative event for all dairies to attend discussing dry cow therapy and how to make it work for your farm

Please ring to book in numbers on
01452 543 999