Achieving pneumonia protection without IBR antibodies

In response to numerous queries, Pfizer Animal Health has provided us with this insight about pneumonia vaccination of pedigree young stock.

Pneumonia outbreaks are more common in housed animals. Mixing, diet changes, over-crowding, poor ventilation and local weather conditions all play a part in triggering a disease outbreak. Once the first animal becomes sick the condition often spreads rapidly within the group.

The cost of pneumonia in a suckler herd was estimated at £82[1] per suckled calf affected. A major hidden cost of a pneumonia outbreak is the reduction in performance. 40% of the total cost in beef suckler animals is due to the loss in thrive both in clinically and sub-clinically affected animals extending finishing times. Housed beef animals on a finishing ration will cost about £10 per extra week to keep!

Pneumonia in cattle can be initiated by viral infections, lungworm or “stress” which opens the door allowing secondary bacterial infections to take hold. Addressing these trigger factors should lead to a reduction in disease.

RSV, PI3, IBR and BVD virus are commonly associated with pneumonia.

- RSV causes severe lung damage typically affecting cattle less than one year old
- PI3 virus damages the upper airways allowing bacterial infections to become established.
- IBR virus causes severe upper respiratory tract disease typically in bought in store cattle
- BVDv reduces the herd immune status and allows other infectious agents to cause more severe respiratory disease.

Vaccines are available to protect animals against these pathogens.

Bacteria associated with pneumonia can be found in the nostrils of healthy cattle. These organisms multiply and invade the lung in animals which are immuno-suppressed or have suffered a viral respiratory infection.

Mycoplasma bovis causes a chronic pneumonia often exacerbated by viral infections/stress. It is difficult to treat unless early antibiotic therapy across the group is implemented.

Aim to house animals in dry, draught free conditions. Outlets in the roof will allow hot stale air out and air inlets above animal level will let fresh air in.

Many members want to protect their animals but do not want an immune response to Infectious Bovine Rhinotracheitis (IBR). This is achieved by using vaccines without an IBR component. Vaccines such as Rispoval® 3 protect animals against RSV, PI3 and BVD. For a more rapid protection in younger animals Rispoval® Intranasal which contains RSV and PI3 can be a solution.

Neither of these vaccines contains IBR so you can be confident animals vaccinated with these vaccines will not mount an antibody response to IBR. We urge you to discuss pneumonia control with your vet.

Information supplied by Pfizer via the NBA. 04.01.10

Rispoval® Intranasal contains modified live BRSV and PI3 viruses. Rispoval® 3 contains modified live BRSV and PI3 viruses and inactivated BVD virus.

[1] Andrews A.H (2000) Cattle Practice Vol 8 Part 2: 109-114