

Press Release – 9th March 2007

Getting to grips with sheep diseases

There are many diseases that affect sheep and lambs, most of which can, and often do, lead to the death of the affected animals. Knowing which of the diseases are likely to be present in a flock, whether they affect lambs, ewes or both and when they are likely to be a problem are all important factors when deciding on the most appropriate disease management/prevention strategy.

If faced with a disease outbreak in a flock it is often too late to prevent financial losses, both in terms of lost animals and also the knock-on effect it will have on the longer-term productivity of the flock. A comprehensive Intervet-sponsored study performed during the 2003/2004 season by independent veterinary consultant Dr Tony Andrews looked at the total costs of an outbreak of pneumonia caused by *Mannheimia haemolytica* and *Pasteurella trehalosi*. The study concluded that the cost benefit of vaccinating was at least 5:1 when compared to the cost of disease in a non-vaccinated flock.

The names of the bacteria that cause diseases in sheep and lambs can sometimes be confusing. However, the conditions they cause (for example, pneumonia, lamb dysentery, blackleg and tetanus) are generally very well known.

The following table shows the diseases sheep are likely to encounter as a result of the eight clostridial agents and two pasteurellas. It is worth knowing that *Mannheimia haemolytica* used to be called *Pasteurella haemolytica*.

Clostridial diseases

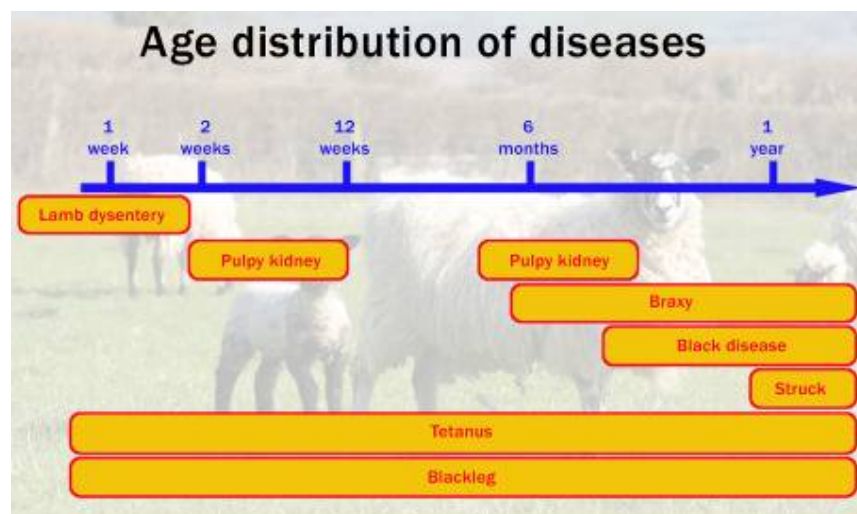
Causal agent	Effect
<i>Clostridium perfringens B</i>	Lamb dysentery
<i>Clostridium perfringens C</i>	Struck
<i>Clostridium perfringens D</i>	Pulpy kidney
<i>Clostridium tetani</i>	Tetanus
<i>Clostridium septicum</i>	Braxy
<i>Clostridium novyi</i>	Black disease
<i>Clostridium chauvoei</i>	Blackleg
<i>Clostridium haemolyticum</i>	Bacterial redwater

Pasteurella

Causal agent	Effect
<i>Mannheimia (Pasteurella) haemolytica</i>	Pneumonia
<i>Pasteurella trehalosi</i>	Pneumonia

Timing

Different diseases occur at different ages, and the following table shows when to expect the different clostridial diseases in sheep. Clostridial spores are found in the soil, are highly infectious and very hardy meaning they can survive for long periods.



***Ovivac-P Plus*[®] covers the diseases that occur in lambs – pulpy kidney, braxy, tetanus and blackleg. Lamb dysentery protection is provided from the ewe's colostrum. *Heptavac-P Plus*[®] is for the older animal and covers additional diseases such as struck and black disease. Both vaccines contain *Mannheimia haemolytica* and *Pasteurella trehalosi*.**

The situation for pasteurella is somewhat different, but much easier to understand since pneumonia caused by *Mannheimia haemolytica* and/or *Pasteurella trehalosi* can occur almost at any time. These bacteria are naturally present in the lungs and tonsils of six out of 10 sheep, and it is only after a precipitating factor, such as a stressful event, that disease may occur. The bacteria start producing toxins which regularly leads to rapid onset of disease often resulting in death in apparently healthy animals. Pasteurellosis is probably the most common cause of death in growing lambs. Survivors generally don't perform as well as healthy lambs.

Treatment or prevention

It is possible to treat for clostridial diseases and pasteurellosis using antibiotics. However, by the time treatment takes effect the disease has already severely affected the animal.

Administering antibiotics to a group of animals can also be very time consuming. Even those that do recover will not perform as well as their healthy counterparts. Disease prevention through vaccination may at first be seen as an expensive option, but will invariably be the most cost-effective route for farmers to follow.

There are many sheep vaccines on the market so it is important to choose the right one for the job. Use the timing chart above to match the problem diseases with the vaccines available.

Spring offer

Intervet will be selling a 500-lamb all-in-one vaccination pack this season. The pack contains sufficient Ovivac-P Plus to give 500 lambs the two doses required for their primary vaccination course. The primary course comprises one 2ml dose followed by another 4-6 weeks later. Also contained in this handy pack is a free Rapi-jector II vaccinator gun and the very useful Intervet sheep vaccination timing calculator.

