

Broad spectrum vaccination of calves against pneumonia will help reduce reliance on antibiotics to control this costly disease.

# Beware bacterial pneumonia

**Bacteria rather than viruses are the most commonly identified cause of pneumonia outbreaks in calves under six months of age, according to an analysis of recent disease investigations submitted by vets from across the country.**

Data collected by UK vet laboratories between 2011 and 2013 – based on more than 1000 diagnostic samples submitted by vets from various farms nationwide – found that the most commonly isolated pneumonia pathogen was the bacterium *Mannheimia haemolytica* (previously known as *Pasteurella haemolytica*). It cropped up in around 30% of submitted samples.

Vet scientists emphasise that *Mannheimia haemolytica* is a complicating agent in many pneumonia outbreaks in young calves – so much so that practical pneumonia control programmes should now focus more closely on this organism as part of an overall disease management strategy.

Vet Bill May from the XL Vets' practice Lambert, Leonard and May based in Cheshire agrees, pointing out that while the most common viruses implicated in pneumonia are RSV, IBR and PI3, bacteria are often also involved.

"The viruses can cause serious disease on their own or they may weaken a calf's natural defences, allowing bacterial infections to take hold. And while some bacteria are almost invariably present as a result of

secondary infections, they can also be causative. We know that antibiotic injections can make sick animals better and because antibiotics do not work against viruses, that does suggest antibiotic-sensitive organisms such as bacteria are present. This new analysis of the latest diagnostic data from UK farms confirms this point," he adds.

Whatever its cause, pneumonia continues to cause considerable financial losses to beef producers. Losses include deaths, high veterinary labour and treatment costs and, significantly, depressed subsequent performance in animals that appear to have recovered from the disease.

"When it comes to managing the threat of pneumonia the best form of defence is attack through good preparation and vaccination. The disease costs are significant – thought to be as much as £80-90 per affected calf about 10 years ago, but today the disease cost is even higher because of increased animal values," Mr May argues.

"Planning ahead is crucial and this means working with your vet to minimise the chances of the disease eating into your margins. Disease prevention is the name of

the game, so spending some time analysing the weaknesses of your system before housing will go a long way towards helping you protect your cattle from disease problems," he says.

Mr May advises cattle producers to work with their vet to carry out a thorough investigation of all the factors involved in any pneumonia outbreak.

"We know that many factors combine to cause pneumonia problems – such as building ventilation, stress, infection pressure and calf immunity – so make sure you work with your vet on a rigorous appraisal of all the potential issues that may be involved on your farm. Only once you've done this can you implement the optimum disease prevention plan for the future, which will certainly improve long-term animal health and potentially even reduce your reliance on antibiotics to control this financially damaging disease," he says.

With the availability of a unique vaccine, Bovilis® Bovipast RSP that protects calves against the key bacterial pathogen *Mannheimia haemolytica* – as well as the common viral causes of the disease – it makes sense to re-visit pneumonia control strategies, adds Mr May.

And with the industry drive to reduce widespread reliance on antibiotic treatment gaining significant momentum, vaccination is a more cost-effective disease management option over the longer term. ◀