

# Vital to act fast with pneumonia

**N**OW is a good time to prepare against the possibility of pneumonia in calves. Vaccination is important in helping to prevent the disease.

## Should I vaccinate my cattle against pneumonia?

Respiratory disease (pneumonia) is the most common cause of death in cattle between weaning and 12 months of age. Often control is not straightforward (as discussed below) but on the majority of farms, vaccination should form part of any prevention strategy.

Housing, and the immediate period after, is particularly high risk, when calves may be mixed together for the first time, having sometimes been transported long distances. Most deaths or treatments for pneumonia will be required in the period between housing and the new year.

## Why is vaccination

## VETERINARY ADVICE

**Andrew Schofield, MRCVS, of Minster Veterinary Practice, York, discusses the importance of vaccination in calves**

### important?

Most outbreaks of pneumonia in cattle are viral in origin. Antibiotics are active against bacteria but they will have no effect on viruses. We rely on vaccination to prevent these viral diseases.

After any initial viral challenge, cattle quickly develop secondary bacterial infections with bacteria such as mannheimia and pasteurella. It is for this reason we will always use antibiotics to treat pneumonia.

### Which vaccine should I use?

There are a multitude of different respiratory vaccines licensed for use in the UK that provide protection against the main respiratory pathogens such as

Respiratory Syncytial Virus (RSV), Parainfluenza 3 (PI3), Infectious Bovine Rhinotracheitis (IBR) and Pasteurellae.

The particular vaccine used depends on previous problems diagnosed on your farm, the age of the cattle, whether home-bred or being bought-in, and how quickly you need it to work. All these factors should form the basis of a discussion with your vet.

### So investigation of any current pneumonia problem is important?

Yes, it is vital that if recurrent pneumonia problems occur an investigation should be conducted. Samples may be collected from a fresh case, or a calf

that has died relatively quickly.

The samples will be submitted to your local veterinary investigation centre (AHVLA or SAC) to allow identification of the causal pathogen. This means that any pneumonia vaccine protocol can be targeted to the individual farm.

### When should vaccines be administered?

Vaccines are a prevention and not a treatment. Ideally, vaccination should take place well before housing and while calves are still at pasture.

Some vaccines rely on two doses being administered three to four weeks apart. Full immunity may not be achieved until ten days after the second dose. Hence there is a gap between a vaccine being given and full immunity being established. With some vaccines such as IBR this immunity gap can be reduced by giving the vaccine intra-nasally, rather than intra-muscularly.

Vaccinating animals at pasture can be difficult and time-consuming, but it does



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pay dividends. Where this proves impractical, then some farmers vaccinate at housing – not ideal, but infinitely better than doing nothing.

### I have been disappointed with respiratory vaccines in the past, why should this be?

Any disease outbreak is nearly always multifactorial in origin, and pneumonia is no exception. Factors play-

ing a part include the calf's immunity, nutrition, stocking rates and ventilation.

A vaccine will not be effective if there are fundamental problems with ventilation or a mineral deficiency. Any husbandry issues should be corrected before a vaccination policy is embarked upon.

An initial, accurate diagnosis is the foundation of vaccine use on any farm.