

Vet Tim O'Sullivan, from the XL Vets' practice Shropshire Farm Vets, says poor quality colostrum and/or an inadequate colostrum feeding regime are at the root of a lot of the pneumonia problems his practice sees in young dairy calves.

Tackling pneumonia in practice

Case study

r O'Sullivan says: "The other main contributing factors to disease levels in calves are inadequate bedding and hygiene, insufficient ventilation or lack of shelter, over-stocking and too much contact with adult stock. The farmers who are able to tackle all these 'risk factor' issues effectively are the ones who really get on top of pneumonia problems."

Mr O'Sullivan also points out that all-year-round calving can mean pneumonia has become a problem for some farmers at any time of year, and not simply during the traditional disease months of autumn and winter.

"Overstocking is a big issue, especially for farms shut down because of TB," he says.

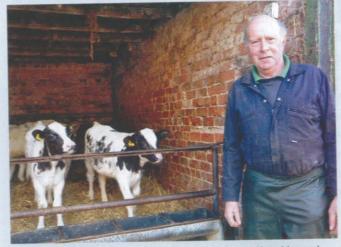
Where pneumonia becomes a grumbling problem on a unit, Mr O'Sullivan and his colleagues work closely with the farmer to reduce the chances of FOR calf rearer Phil Jones, of Longden Hall Farm, Longden, Shropshire, pneumonia is very much an occupational hazard. Four years ago he scaled down his dairy herd and now concentrates pretty much exclusively on rearing high quality continental beef-cross calves. He also runs a small suckler herd.

"Barring TB movement restrictions, we buy in around 150 calves a year from four different local farms that we know well. They come onto the farm when they are between 10 days and a month old.

"Unfortunately, it's difficult not to mix stock up and on our site younger animals do come into relatively close contact with older cattle sometimes.

Consequently, pneumonia has always been a grumbling problem here – once it's on a farm it never really seems to go away – but we are able to keep it in check with good husbandry and being ever vigilant for any signs of disease," he explains.

Mr Jones says infected calves



Calf rearer Phil Jones says pneumonia is an occupational hazard.

can go down hill quickly. "If you are suspicious about a calf it is important to act fast," he stresses. "Don't go in for your breakfast and think about it because calves can deteriorate very quickly. We don't suffer mortality, but I have definitely seen growth checks in calves because of the permanent lung damage pneumonia causes."

Following advice from his vet Tim O'Sullivan, he switched to Zuprevo last winter as his antibiotic of choice. "We always inject any calves showing signs of pneumonia with Zuprevo and an anti-inflammatory. But if a few animals in a pen are exhibiting symptoms I treat the whole batch.

"It works extremely quickly and the sick calves I have treated have been looking much better within an hour. But I also like the long duration of cover Zuprevo provides and this give me reassurance the calves' lungs are being well protected against the growth-reducing effects of the disease for a full 28 days after treatment."

the disease gaining a strong foothold.

"In a disease outbreak situation we advise isolating and treating any affected calves with an effective antibiotic and anti-inflammatory as soon as possible. We will also aim to break the infection cycle

between adult animals and youngstock. This is best achieved by not allowing both groups access to the same airspace.

"Clients who have invested in a dedicated rearing house or moved to rearing calves in outside hutches often find pneumonia problems clearing up, but if this does not work or is not practical we will do diagnostic work to establish whether the causative disease organism is viral or bacterial, and then advise on the appropriateness of a vaccination programme," he says.

Prompt treatment is essential

speed is of the essence when it comes to treating pneumonia cases effectively and limiting lung damage.

Alfredo Sanz Moreno, livestock veterinary adviser with MSD Animal Health, says: "Look and listen for the clinical signs of pneumonia such as a reduction in feed intake, coughing and runny noses and take calf temperatures. Normal body temperature is 38.6deg C and anything higher than 39.4deg C indicates the calf is under disease challenge and lung damage may have started.

"You have to act quickly. Achieving a rapid and effective cure, which limits permanent lung damage, is the priority when it comes to cutting the costs of the disease," says Mr Sanz Moreno.

"Unless you act quickly, the reality is most calves visibly affected by pneumonia suffer from some degree of lung



Vet Jim McKinstry (right) listening for clinical signs of calf pneumonia.

damage – but this can be reduced by the simultaneous control of bacterial infection and local lung inflammation," he adds.

Gold standard

"An effective antiinflammatory treatment in combination with effective antibiotic therapy is now the gold standard pneumonia treatment protocol for animals already showing clinical signs of pneumonia. It helps reduce permanent lung damage and enables better delivery of the antibiotic into the lung tissues to speed up recovery.

"For example, the pneumonia treatment Resflor reduces permanent lung damage. It combines antibiotic and anti-inflammatory in a single, injection. It starts killing pneumonia bacteria within 30 minutes with high concentrations reaching all areas of the lung within six hours. Trials have shown Resflortreated animals had 37% less lung damage compared with cattle

treated with antibiotic alone¹."

Where a number of calves in a pen are showing clinical signs, Mr Sanz Moreno says it is worth consulting your vet about the value of long-acting metaphylactic (batch) antibiotic treatment.

"The bacteria responsible for pneumonia are found in the respiratory tract of healthy cattle and stress or a greater infection load – such as exposure to sick calves – can easily trigger disease," he explains.

As a disease control measure, once pneumonia has broken out in the group and there is a high proportion of animals showing signs of illness in a short period of time, talk to your vet about which animals will require treatment.

Ref 1: Weingarton A et al, World Buiatrics Congress 2006.