

'Stop the cough' with speedy and effective treatment

Vigilance and vaccination

Producers know the importance of colostrum and good housing and hygiene, yet calf pneumonia still has a devastating impact on some units. We spoke to a vet to find out outbreaks occur and what you can do to help ensure that your calves remain 'cough free' this winter.

text Rachael Porter

Calf pneumonia, be it viral or bacterial, is a complex disease – that's why it's tough to prevent it, according to Merial vet Fiona MacGillivray. "But it is possible," she says.

"Key to success is to pay close attention to three main areas – the animal, the environment and the pathogens.

"Increasing the chances that the animal is going to be able to fight infection and therefore not be affected by disease is a fundamental part of trying to prevent pneumonia. Making

sure that the new born calf gets enough good quality colostrum sounds obvious, but it's still not happening on all units and it can be a factor in herds with a calf pneumonia problem," says Miss MacGillivray. "So can stress, caused by weaning, de-horning and castration. It's a good idea to stagger these management practices rather than doing them all at the same time – it simply creates too much stress."

Housing is another area that producers should scrutinise. "Ask yourself if your sheds are over stocked – expanding cow

number on many units means that calf housing facilities are being stretched. Also check to see that ventilation is adequate and make sure that bedding is clean and dry – change it frequently."

Maximise defences

"Build up of ammonia and too much moisture in the air can cause the natural defence mechanisms to become overwhelmed, which means pathogens can more easily enter the lungs, causing damage to lung tissue and disease. In other words, make sure you house calves in an environment that allows them to maximise their own defences against any disease threat," says Miss MacGillivray. And last but not least, reduce or remove the threat from pathogens by practising good hygiene and avoid mixing calves of different age groups in the same pen or air space.

"Every farm is different, so it may be that more emphasis should be made on one or more of these three areas according to the set up on each unit. But tackle these three areas thoroughly and as a matter of



Dan Webster

routine and you'll go a long way to reducing the pneumonia threat."

If the disease is still a problem, vaccination can also form part of a pneumonia prevention programme.

Cases of viral pneumonia in cattle peaked in January 2009, according to data from SAC Consulting's Veterinary Services, prompting advice to producers from industry vets that vaccination of vulnerable animals just before housing is an essential part of good management practice.

SAC says that an increase in the number of outbreaks of respiratory disease is anticipated again this season and so it 'recommends the continued promotion of respiratory disease vaccines in housed cattle'.

The three viruses identified by SAC in the



Tim O'Sullivan

January peak were RSV, PI3 and bovine herpes virus type 1, the cause of IBR.

In addition to these, Pfizer Animal Health vet William Sherrard recommends that vaccination programmes should cover the immuno-suppressive BVD virus and offer at least six months duration of immunity for winter-long protection.

Reduced yield

In dairy heifers, pneumonia during the first three months of life has been found to reduce first lactation milk yield by 2.2% and increase age at first calving by two weeks.

"Producers should contact their vet for advice about autumn vaccination of susceptible growing cattle against the four key viruses commonly associated with respiratory disease," Mr Sherrard warns. Vigilance is vital in both vaccinated and unvaccinated cattle, according to Miss MacGillivray. "Identifying an outbreak as soon as possible is important because this will not only help to reduce the severity of the disease for the infected animals, but it can also help to minimise its spread," she says.

Early symptoms include an 'empty gut', because calves have gone off their feed, and depressed-looking animals with droopy ears. "When calves are in large groups these signs can easily be missed, but it's well worth taking the time to have a proper look at your stock at least twice a day. Some of the nastier viruses, such as RSV, can strike quickly so observing calves morning and evening is vital."

The more familiar and easily spotted symptoms include coughing and nasal and eye discharge. At this point the disease has already taken a foot hold.

"Remove diseased animals from the rest of the group. If you catch them nice and early you can significantly reduce exposure for the remaining calves," says Miss Macgillivray.

"And treat them with a fast-acting antibiotic and an anti-inflammatory drug.

The latter will help to minimise damage to lung tissue and improve lung function."

Classic conditions

Dan Webster was fast to act earlier this year when there was an outbreak of calf pneumonia on his unit. He's the herd manager on Michael Oakley's Lower Shadymoor Farm at Dorrington, near Shrewsbury, and is charged with looking after the 450-strong herd plus youngstock. A spring-calving herd, more than 300 animals calve between January, February and March so there's a lot of pressure on the buildings, cattle and people.

"And this year we had some very cold weather at night and some warm days, which are classic conditions to trigger a pneumonia outbreak," says Mr Webster.

"There were a lot of calves in the sheds at the time, and they were affected by the disease."

He brought in his vet, Tim O'Sullivan, and he knew that he had to act quickly to contain the situation.

"It was the beginning of calving season, and a lot of calves were infected. We had to put a strategy in place to deal with the outbreak before it spread any further, because a lot of cows were calving," says Mr O'Sullivan.

One-shot product

"Our strategy involved treating all the animals that were already infected – around 75 cattle – and the animals that had been in contact with them. We treated with antibiotics and anti-inflammatory drugs, and put a preventative vaccination programme in place as well.

"The antibiotic we used was Merial Animal Health's Zactran and we had a really good response. Some calves had already died, and those with pneumonia looked very poorly. But within 48 hours, those animals that had been treated were looking a lot better," he adds.

"From a management point of view, the one-shot product is an ideal solution as it requires less labour on the part of the producer. When you have 100 cows a month calving you need something you can administer with one shot and still ensure really effective treatment. Speed of action is also really important."

"We certainly found this antibiotic to be very effective," says Mr Webster. "It is a single dose product, and when the animal is already stressed it is important to reduce the amount of handling. It's also better for us too when there is so much going on." |

