

## TWEAKS TO FARMING SYSTEM SEES PNEUMONIA CASES HALVED ON REARING UNIT

For a Devon calf rearer, a few tweaks to the farming routine and health management of the calves has seen the number of cases of pneumonia slashed by more than half.

The farmer, who wishes to remain anonymous, started rearing calves a couple of years ago and has steadily grown the number he rears from 100 to now almost 500 calves a year. He supplies about 10 calves a week direct to slaughter at around 400kg liveweight.

Management of calves is typical of a black and white calf rearing system, and pneumonia has always been a challenge.

### Management of calves

Calves are sourced from a handful of dairy farms and some collection centres from seven days old onwards. They are reared in individual hutches and are fed three litres of milk twice a day until they are eating 1kg of a calf starter pellet a day, which is typically at around eight weeks of age. Milk is gradually reduced at this point. Forage is also provided in the form of straw bedding.

At eight weeks old, they are moved into groups of eight for one month, and then at 12 weeks of age they are batched into groups of 40 as they enter the main shed.

Animals stay in these groups until they are finished at about 12 months old. During this time, they are fed an ad-lib cereal based diet with straw provided as a fibre source.

On arrival calves were being vaccinated with a pneumonia vaccine that required two doses given four weeks apart, with full immunity not occurring until fourteen days after the second dose. It was during this period that many calves appeared to be contracting pneumonia.

The farmer says: "We were in despair as we were losing too many calves. It was at this point we decided to get Molly McKay from Westpoint Vets involved and she came down to look at the calves," he says.

Westpoint Vets has recently launched a new service called Beef4Life, which is supported by Zoetis. The service is a contract between the vet and farmer and is tailor made to focus on specific areas that provide a financial gain to the farm.

When Ms McKay first came down to assess the calves in November 2016, mortality for the 14-week period from November to February stood at 5.2% - with 24 out of 465 calves dying from pneumonia. Morbidity (treatments) was 13.5%, with 63 calves out of 465 treated for pneumonia.

Ms McKay says: "When the pneumonia was at its worse the medicine bill was in excess of £3,000 per calendar month for the treatments alone and the farmer was treating in excess of 60% of his animals for pneumonia.

"Growth rate targets were also not being hit. Average daily liveweight gains (ADLWG) across their time on the farm were 1.3kg/day, but the target growth rate average should be 1.5kg-1.7kg/day during the finishing phase," she says.

Since she has been working with the farm she has managed to halve the number of cases of pneumonia and halve the treatments required.

## **Management changes**

One of the first things that we changed was the vaccine protocol. Rispoval<sup>®</sup> IntraNasal, a one dose pneumonia vaccine against Bovine Respiratory Syncytial Virus (BRSv) and Parainfluenza Virus (PI3v) which can be given from nine days of age, was introduced, alongside an intranasal IBR vaccine (Rispoval<sup>®</sup> IBR Marker Live).

Ms McKay explains: "Because these are both intranasal vaccines, they have a fast uptake by stimulating local immunity in the nasal mucosa."

Hygiene was also stepped up in the calf hutches, with rigorous daily cleaning of the milk, water and feed buckets, and buckets being assigned to calves for the entire time they are in the hutches to reduce any cross contamination.

Cow flow was also altered in the main finishing building.

The farmer explains: "Because the shed houses calves of different ages, to reduce the risk from shared airspace, it was recommended that calves are housed in order oldest to youngest.

"The shed works like a conveyor belt, so, every time a new batch move in, each group moves along to the next pen. This means the oldest animals are at one end of the shed and youngest at the other," he says.

A yeast product has also been introduced into the feed at three months to try and level the eating habits of the animal.

The farmer explains: “We were having some issues with scouring, so felt a yeast could help with digestion. It has helped a lot,” he says.

### **Benefits to calf health**

Since altering the vaccine protocol, cow flow and improving hygiene in the hutches, pneumonia rates have been slashed by half and treatment rates by more than 60%.

Ms McKay explains: “From February to May this year mortality dropped to 2.6%, which is a 50% reduction and morbidity rates were down to 5.2%, with a 61.5% reduction in treatment rates.”

Calves are also finishing quicker. The farmer explains: “We are now getting calves away at, on average, 11.5 months instead of 12-13 months. We are also getting better carcass grades.”

“Molly has really turned things around for us,” he adds.

### **Getting a good start in life**

Zoetis vet Carolyn Hogan stresses the importance of giving animals the best start in life and maximising respiratory health in order for them to achieve their lifetime potential.

“It's estimated 67% of pneumonia cases occur in calves less than three months of age.

“Whether suckled or reared, calves that don't grow effectively in the early weeks are unlikely to catch up later.

“On both dairy and beef units, proactive management of the calf living space, nutrition and disease resilience is critical to maximise lifetime productivity, which is clearly so important under today's farm business economics,” she adds.

Risposal<sup>®</sup> RS+PI3 IntraNasal contains modified live PI3 virus, strain ts RLB103 and modified live BRSV, strain 375. For the active immunisation of MDA positive or negative calves from 9 days of age against BRSV and PI3 virus, to reduce the mean titre and duration of excretion of both viruses. POM-V

Risposal<sup>®</sup> IBR-Marker Live contains attenuated gE negative BHV-1 strain Difivac. For the active immunisation of cattle to reduce the clinical signs of IBR, reduce virus shedding and to reduce BHV-1 associated abortions. POM-V