



# Critical-care pointers key to calf health

One Somerset-based producer shared how a ‘total quality management’ approach has significantly reduced calf mortality rate on his 800-cow unit with delegates at this year’s National Youngstock Conference.

TEXT RACHAEL PORTER

**A** specific focus on four critical areas of calf management has seen calf mortality drop from 10% to 2.5% in just 18 months on one 800-cow unit. And steps to taking this relatively low-cost approach, without investment in new housing or facilities, was shared with delegates at the National Youngstock Conference by Boehringer Ingelheim Animal Health ruminant vet, Becca Cavill. She led a session from #Calfmatters, accompanied by Somerset-based producer Ross Edwards, from the Radstock Co-operative.

In a bid to reduce mortality, the result of neonatal scours that then predisposed calves to pneumonia at his unit, he focused on four key critical areas of management – the calving pen, colostrum and immunity, hygiene and vigilance. Heifer age at first calving for the herd is 23 months. Mr Edwards and his team work hard to maintain this and know the importance of ensuring neonatal calves get off to the best possible start so they can achieve target growth rates.

Cows calve on straw yards, and calves are then moved to the calf-pen shed, typically within three hours, where

they are fed between three and four litres of top-quality colostrum. Calves are kept in individual pens for 10 days before being group housed in batches of 20 and fed milk via an automatic feeder.

## Scour issues

“The main calf shed was not built for purpose. Like most units, we use what we have and do our best to make it work. It’s well ventilated and we take care to ensure there are no draughts and the bedding is warm and dry. “But 18 months ago we were having issues with moderate to severe scours in calves, at about seven days of age and we had 24 hours to tackle it before we lost the calf. For every one that survived we’d lose one. Mortality ▶



Ross Edwards:  
**“We want to see  
calf mortality  
rates down at 1%”**

◀ was running at about 10% and it was demoralising for staff,” said Mr Edwards.

He believes this also predisposed the calves to pneumonia, which calves that had survived a bout of scours then were then typically struggling with at about four weeks old. “So it wasn’t just about losing calves to scour, it was the subsequent ill-thrift that left them vulnerable to respiratory disease. We were seeing an unacceptable high rate of calf mortality between zero and 42 days old.”

He looked at the critical control points, starting with the calving yard. “We added more bedding – twice a day if required – in a bid to keep it dry and clean, but there was still too much muck in there. So now we clean the shed out fully every three weeks, or every two weeks during busier calving times,” he explains. “We can’t effectively disinfect the shed as it has a stone base, but we do use lime.”

Stocking rate has also been reduced. “We aim to keep no more than 20 cows in the close-up straw yard, even when high numbers are due to calve. This requires extra vigilance in the transition-cow cubicles.

“Also, the calving pen, which is an easy-to-access gated corner of the straw yard, has been turned into a sand pit because it’s easier to keep free of contamination. And it’s only used for calving cow – not for sick cows.” Colostrum and immunity were Mr Edwards’ next focus. “To put it broadly, we try to be a little more ‘on it,’” he told delegates. “Every calf will always get four litres of colostrum as soon as possible after birth – ideally within two hours and definitely within six hours. And we’ll top this up with a further two litres six hours later. All colostrum is quality checked with a Brix refractometer.

### High-quality colostrum

“If it measures at less than 20 we’ll top it up with high-quality colostrum powder. Colostrum measuring 24 or higher is prioritised towards dairy heifers. All colostrum is ‘harvested’, to scrupulous hygiene standards, in the milking parlour and fed fresh, or stored and frozen in four-litre bags. Colostrum is tube fed to ensure calves receive the correct quality at the optimum time.”

Hygiene is key here, to avoid colostrum contamination, and extends to calf housing and feeding, feed equipment and milk preparation. Putting protocols in place is vital.

Mr Edwards’ protocols include the use of warm water and detergent when washing feeding equipment, as well as hypochlorite “We insist that equipment is dried, so buckets are stored upside down.”

His team also has a colour-coded am/pm teat system and separate tubes for colostrum feeding newborns and treating sick calves, to help avoid cross contamination. “They’re simple things that are easy to do, but make all the difference,” he said, adding that setting up a specific ‘calf kitchen’ has certainly helped here too.

Vigilance is vital too and he told delegates that you can never have too much of this. “It’s important to create an ethos of shared responsibility. Everyone looks out for the cows, the calves and each other and good communication is key. If the person feeding the milkers, for example, sees a cow calving in the yard, they don’t



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need to stop and deal with it, but they can tell someone.” “Flagging up potential problems to other staff is a good idea as people do take days off,” added Dr Cavill. “You can’t have one person managing calves 365 days a year, so everyone needs to know what’s going on, what has to be done, and what the protocols are.”

### Mortality rates

The approach at Radstock is clearly working, with calf mortality rates now down to 2.5%, achieved without replacing the sheds or significant financial investment. It’s all down to ‘total quality management’. There was plenty we could improve with what we already had, without investing in new buildings,” said Mr Edwards. Looking ahead, he and his team want to see calf mortality rates down to 1%: “That’s our aim and we’re working towards it,” he said. “We’re going to start blood testing calves, to see how successful our colostrum management is, and adjust it if not working as it should do. We also want to create a larger calving yard, which will reduce pressure on staff and facilities at busier times, and we want to keep making margins gains by paying even closer attention to detail.” |



Early days: colostrum is key to protecting the health of young calves