

Calf scours – know your enemy

Is scouring cause for concern on your unit? We look at some key areas where easy wins can be made to help reduce the incidence of diarrhoea in calves.

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Calf scour is costly. An AHDB report put the average immediate cost at nearly £60 per case, but it's the long-term impact on production that is most significant. An episode of scour in calves is associated with lower average daily liveweight gain and reduced first-lactation milk production. And, alongside respiratory disease, it is one of the top causes of neonatal calf mortality.

Between 2001 and 2018, 25% of all registered on-farm calf deaths occurred in the first three months of life. Mortality in dairy calves has not improved significantly during that period, despite a wide body of research regarding passive transfer of immunity and other aspects of calf health and welfare, and improved knowledge exchange between researchers and producers. So, clearly, there's more work to do to better on-farm calf health and reap the rewards associated with a healthier animal.

"The first step, if you have a scour issue, is to speak

Ali Haggerty:

"One in seven calves suffer from failure of passive transfer"



to your vet or adviser and get a pragmatic view on any problems," says vet Ali Haggerty, from Stewartry Vet Centre in Kirkcudbrightshire.

"After time, a certain level of scours in the calf-rearing shed can become 'normal' or acceptable. So fresh eyes are really useful here, as is an open and honest relationship with your vet. They should also be realistic about any goals and objectives that should be set to reduce scours and to set you on the correct path to resolving issues," she adds.

Identifying cause

It's important to 'know your enemy' by identifying if the scour is pathogenic or nutritional. "It can, of course, be both. So cover all bases with your vet. And check that feeding management, for example, isn't causing scours." The next step, according to Mrs Haggerty, is look at colostrum protocols. "Go back to basics," she says. "I know it's banging an old drum, but feeding 10% of the calf's bodyweight of good quality (that means a reading of more than 22% on a Brix refractometer) and clean colostrum within the first six hours of life is the cornerstone of any good calf rearing system. And it's vital in helping to prevent disease, including scours."

A simple blood test can check the effectiveness of passive transfer of immunity to calves from colostrum. A recent study carried out by Mrs Haggerty and colleagues at Glasgow University found that one in seven calves suffer

from failure of passive transfer (FPT). Testing highlights where colostrum protocols are inadequate – or not being followed. "So that's always a good starting point."

"The test can be carried out quickly and easily, at calf side, and it's something more producers should be asking their vet to routinely carry out," adds Mrs Haggerty. "It's a great way to check if calves are getting off to the best possible start and is a good indication of how well colostrum protocols are working. It's certainly something that units looking to take better control of calf scour should be doing routinely over longer time periods."

Blood test

She adds that calf rearers engage positively with passive-transfer testing. "They're keen to do it. It's motivating and it also allows them to see and measure the results of their efforts with respect to colostrum management. As well as checking that immunity in early life is as good as it possibly can be, testing can flag up if management changes may be required to improve passive-transfer success."

Another 'back to basics', but important area to focus on is hygiene. "By this I mean cleaning and disinfecting everything, from the calving box, calf barrow and calving equipment through to the calf's environment, and feeding and preparation equipment.

"Don't forget about yourself and staff working with the calves. Wash hands, wear clean overalls and gloves, and when handling or feeding calves, tend to the youngest first and move through to the older calves. This is basic biosecurity and really can help to prevent disease in older calves passing to younger animals."

Cleaning before disinfecting is important because dirt can 'de-activate' some disinfectants. Hot soapy water is key to washing milk mixing and feeding equipment and removing that colostrum/milk 'scum'. Disinfectants should then be used correctly – check the dilution rates and ensure there's enough contact time to maximise efficacy. "And also remember that not all disinfectants are equal. Not all will kill cryptosporidiosis, for example. Different concentrations of disinfectants will have different efficacies. So double check and measure and mix correctly. Just check that that the disinfectant you

use meets your requirements in terms of disease challenge and use it at the correct concentration. Yes, there could be additional time required and costs involved, but it's a waste of time and money to use a product at a lower dose rate that renders it ineffective."

Another key factor to help prevent scours is communication, and providing easy-to-follow protocols for staff. "How calves are fed and maintaining consistent regimes are important. Training and motivating calf-rearing staff is vital," says Mrs Haggerty. Good training and communication can help prevent nutritional or management scours through good, consistent calf milk replacer mixing. "Staff must understand that they are the linchpin to successful calf and heifer rearing. Their attention to detail and level of care really does make all the difference when it comes to preventing scours and other calf diseases and health problems."

Rehydration protocols

When problems do occur, Mrs Haggerty stresses that rehydration protocols are essential. "Dehydration will kill calves – it's a significant cause of mortality. It's important to make sure everyone understands that by the time a calf is physically seen scouring, the process that damages the calf's gut may have started several days previously.

She recommends using rehydration products containing bicarbonate or a similar alkalinising agent/buffer and an energy source to help restore electrolyte balance and gut cell damage in sick calves. "Glucose or citrate act as a co transporter of sodium across the gut lining, which is required to achieve effective rehydration and to help water absorption by the gut.

"Speak to your vet about the best product for your calves" she adds. "Whatever you choose as rehydration therapy, it needs to be specific to your needs, readily available and offer the most effective treatment."

On most units it's the little things that make a difference. The #Calfmatters 'Guide to continuous improvement in your early-life calf health management' is a great resource to help producers focus on areas that require improvement. |

Visit www.calfmatters.co.uk/resource-shed.



Tummy trouble: identifying the cause of scour is vital