

Organisation is key to spring calving success

Cows need to be in a 'fit not fat' body condition as the time for spring calving approaches, says veterinary surgeon **Keith Cutler**

Now the beginning of the year is behind us, thoughts should start to turn to spring calving. Time spent planning now will be time well spent to ensure that problems are minimised.

The aim is that your cows will all calve easily and unaided, delivering a vigorous, live calf. To do this they need to be in a 'fit not fat' body condition – too fat and the diameter of the birth canal can be reduced resulting in a difficult or prolonged delivery that may affect calf viability; too thin and the cow may lack the stamina to push the calf out.

Colostrum quality and quantity is also likely to be poor if cows are too thin, but if you are worried about colostrum quality it can be measured easily using a colostrometer. If colostrum quality is poor intakes can be supplemented, ideally using a bottle and teat, but via a stomach tube if necessary. Colostrum from a donor cow will provide antibodies specific to pathogens present on your farm.

Additional antibody content can be stimulated by vaccinating the donor cow against *E coli*, rotavirus and coronavirus between 12 and four weeks prior to calving. Take care, however, as it is possible for some pathogens (eg MAP, which is the cause of Johne's disease) to be transmitted in colostrum. If donor colostrum of high quality from a known health status animal is not available, either fresh or frozen, various freeze-dried colostrum replacers are available and may be useful in an emergency situation.

Although calves are born with a fully functioning immune system they do not have any passive maternal immunity because antibodies from the cow can't cross the placenta.



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Colostrum, as well as providing nutrition, is vital in providing this passive maternal immunity, but antibodies can only be absorbed efficiently before 'gut closure' which begins within hours of birth. Calves therefore need to suckle as soon after birth as possible. The recommended amount of colostrum varies between different authorities; however, more recently it has become common to recommend 10% of the calf's body weight within five hours, again repeated before a day of age. In truth, an exact amount is not important; newborn calves need a lot of good quality colostrum quickly.

No matter how much colostrum is

taken by your calves and how good its quality, remember that disease is a complex interaction between pathogens, the immune system and environment. If attacking pathogens are overwhelming, the immune system will be defeated.

As well as ensuring an early and adequate passive maternal immunity through colostrum intake, it is vital to reduce the pathogen challenge to newborn calves. Calving paddocks should be clean and well drained and calving yards and boxes bedded with fresh, clean bedding.

One of the main routes by which pathogens can infect calves is through the navel. The application of clips and antibiotic spray may help reduce the risk, but an antiseptic solution, such as Strong iodine BP, which dries the navel at the same time, is recommended. This should be applied liberally as soon as possible after birth. If the cow licks it off there is no harm in a second application a few hours later.

It is also useful to plan now for what you will need when inevitably a difficult calving presents. How are you going to handle the cow, especially if your animals calve outdoors? Is your calving aid in a good state of repair? Do you have clean ropes or chains and plenty of obstetrical lubricant? Have you got stimulants, a supply of colostrum or colostrum replacer and a clean stomach tube?

A little time spent planning now will ensure that everything required to deal with an emergency is to hand when it is needed.

Keith Cutler is a veterinary surgeon at Endell Veterinary Group and a member of the National Beef Association's Animal Health Committee.