



FEBRUARY 2026

Colostrum Hygiene and Calf Immunity

Calves are born without immunity and rely entirely on colostrum to protect them in the first weeks of life. While most farmers know that volume and timing are crucial, hygiene is just as important. Even high-quality colostrum can fail to provide full protection if contaminated.

The 5 Qs of colostrum are:

Quantity – 10% of body weight for the first feed

Quickly – within 4 hours of birth

Quality – Brix of 22% or above (ideally 25% or above for replacement heifers)

Quietly – calm handling reduces stress when feeding

sQueaky clean – clean, dry teats; equipment washed with hot water and detergent; keep colostrum cool and feed promptly

WHY HYGIENE MATTERS

Dirty or contaminated colostrum can significantly limit antibody transfer, even when colostrum quality, quantity and timing of feeding are otherwise adequate, because bacteria interfere with antibody absorption in the calf's gut. This can lead to low total protein, weaker immunity, slower growth, and higher risk of scour or pneumonia. Contamination most often occurs during collection, storage, or feeding – dirty teats, unwashed buckets or feeders, and colostrum left warm are common sources. Bacteria double every 20 minutes above 16°C, so proper handling is essential – even relatively clean colostrum can become contaminated when not managed properly.

PRACTICAL TIPS

- Cooling & freezing: Cool colostrum to <4°C before freezing. Thaw in a water bath at max 50°C (colostrum should reach 40–42°C) and feed within 30 minutes.

Storage Method	Refrigeration	Freezing
Max duration	24 hours	up to 1 year
Container	1-2L containers	1-2L zip bags / flat storage
Temperature	4°C	-18 - 20°C

Fig 1: Guidelines for colostrum storage



Avoid microwaves or overheating – these will destroy antibodies. See Fig. 1 for guidelines for storage of colostrum.

- Pasteurisation: Reduces bacteria but cannot fix poor-quality or highly contaminated colostrum.

- Equipment: Wash all collection and feeding equipment in hot water and detergent after each use. Keep dry and feed promptly. Below in Fig. 2 is an example cleaning protocol is found below, each stage being important in removing residues and bacteria and ensuring a clean bucket for the next feed.



Fig 2: Guidelines for colostrum storage

HOW CAN NFV HELP?

CALF TOTAL PROTEINS

The starting point when investigating the success of colostrum management on farm is looking at total proteins on calf bloods, to determine whether those calves have acquired sufficient antibodies. This can be done in house, and bloods can be routinely taken from calves 2-7 days old by vets or our vet techs to monitor whether the 5 Qs are being adequately followed.

NEW HYGIENE TESTING SERVICE.

Further investigation can be carried out focusing on colostrum cleanliness. If you are concerned about the risk of feeding contaminated colostrum to your calves, we are able to test it at the practice for bacterial count and coliform count. This tells us if the colostrum is too dirty and is affecting calf health and antibody transfer, helping us identify whether you need to change the ways in which you collect or store colostrum.

We currently are able to test colostrum, milk fed to calves, bedding, water and we can take swabs of equipment for hygiene levels. Please ask your vet for further details if you are concerned or would like samples to be tested.

Right: Colostrum sample on a bacterial growth plate. The blue dots are the colonies of bacteria.



Pneumonia Season

Hopefully the end of the pneumonia season is in sight but I think it's fair to say it has been a particularly bad year for it. We've seen more cases, calves getting sick younger, and outbreaks that have been harder to get under control. On top of that, we've also dealt with several *Mannheimia haemolytica* (a nasty bacteria) outbreaks in adult cows, which causes severe pneumonia signs and in adult cows is associated with a high mortality rate. Why this has been particularly common this year is not completely understood. The Veterinary Laboratories Agency continue to investigate any new cases to try and understand this disease more. Perhaps unsurprisingly risk factors identified so far have been overcrowding, poor ventilation, mixing heifers with older animals and it is often seen during cold weather and after a week of increased humidity.

Winters seem to be more challenging each year. Prolonged periods of wet, mild weather make management more difficult even in the best of calf sheds. Humidity is one of the biggest risk factors and when there are periods the yards never dry outside humidity will be high everywhere. Stocking pressure, mixing ages and subtle draughts all increase the risk, even when sheds "look" well ventilated. Add in other stressors — such as scour, dehorning, or poor growth — and calves quickly become vulnerable.

Catching cases early makes treatment more successful and reduces long-term lung damage. Sensehub eartags and/or regular lung scanning have helped many farms with this.

Vaccination is no substitute for getting plenty of colostrum in the calves and keeping them in good accommodation not overstocked. When pneumonia keeps coming back or treatments aren't working as expected, diagnostics are well worth considering. There are loads of pneumonia vaccines on the market because there are loads of different bugs on farms, so it is definitely worth finding out what's causing your problem. Some of these are relatively new so there may be an option out there you didn't know about before. Along with that there are various diagnostic options out there for detecting different bugs, together with comprehensive calf health investigation visits, so talk to one of us about the best approach for you.



Team News



Last month Jodie was awarded the 2025 Holstein UK President's Medal at the Semex International Dairy Conference. This is a very well-deserved honour and a great recognition of her contributions and dedication to her club and the industry. Well done, Jodie!

Look out for highlights from her winning essay on using data to help on farm decisions in a future newsletter.

Dates for your diary

Thurs 26th February, 10:30am
Medicines Course

Farmers assured through Red Tractor need to update on one of these courses (or similar) every five years, so these courses are very popular. £70+VAT. Includes a hot lunch!

NFV WhatsApp Communities

For those of you that have missed the opportunity to join our NFV Dairy Community on WhatsApp a couple of months ago, this is the best way to keep up-to-date and connect with what is going on, new services, meetings and other news. And for our sheep clients, we have an NFV Sheep Community just for you too! Just scan the relevant QR code below using your phone camera and follow the link.



Nantwich Farm Vets
Dairy Community
WhatsApp community



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Sheep Community
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