

# Farm news

## Transition Cow Management (Part 1)



**Bobbie Plant**BVM BVS MRCVS

¾ of disease in dairy cows occurs in the first 60 days in milk (DiM). Disease that occurs within this time frame can usually be attributed to management practices in the 3 weeks prior to calving. You may refer to this group of cows as the 'close-up dry cows' or 'transition cows'. We can use the term 'transition disease' to describe any sub-optimal production during the first 60 DiM.

Indications of poor transition cow management will include one or more of the following:

- Clinical effects: stillbirths, difficulty calving,milk fever, prolapse, retained cleansings, metritis, ketosis, LDA, mastitis.
- Sub-clinical effects: reduced fertility, reduced milk yield.



The cost of transition disease is extremely high but difficult to calculate, the primary reason being that the majority of costs are hidden in sub-clinical production losses. It is important to remember that just because clinical disease may not occur at any frequency on your farm; this does not necessarily mean that production isn't suffering as a result of sub-clinical losses. We must also consider welfare implications where there is clinical disease.

### Monitoring

#### Why bother?

- It allows us to assess current performance and ascertain whether or not current management practices are effective.
- Looking at trends over time and how they might relate to differences in management/ housing/ ration etc. historically. This allows us to understand what changes are likely to have the most benefit and ultimately make more informed decisions going forward.
- Like with any form of monitoring it serves as a warning system and hopefully limits ongoing costs.

#### How?

Measuring rates of clinical disease such as ketosis. The problem with this approach is that the incidence of these diseases are relatively low. Therefore the reliability of this data and the sensitivity for detection of problems is sub-optimal.

Measuring transition success! This is a much more accurate way of measuring the effectiveness of transition cow management. A cow is considered to have had transition success if:

- Calving was not difficult.
- No disease encountered in the first 60 DiM.
- Cycling normally by 60 DiM.
- Suitable milk yield for system and stage of production.

Targets for transition success should be based on current performance and agreed with your vet. However, to give some idea; if 70% of cows transition successfully, this suggests management practices relating to the close-up dry cows are good.

To the right is a picture of a score chart that can be used to calculate the transition success of your herd over a 12-month period. If you would like a laminated copy, please ask at reception.



For example: Cow 456 calved without assistance, did not succumb to any disease/s post-calving and has milked well so far. However, she is now 30 days beyond the voluntary wait period and has not yet been served.

## Welcome to Lucy!



We're really excited to be taking on board a new vet, Lucy, into our team this month. Please look out for her and give her a warm welcome if you see her out and about or speak to her on the phone!

### She introduces herself here:

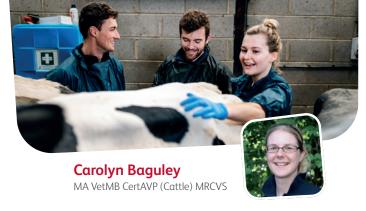
I'm Lucy Johnson, I've recently graduated from Cambridge vet school and I'm excited to join the farm team at Scarsdale in September. At university I've found all areas of farm practice interesting and have particularly enjoyed small ruminant work.

In my free time I love hillwalking, playing tennis and swimming and I'm looking forward to exploring the Derbyshire countryside.

Scarsdale Vets
Farm

scarsdalevets.com

For more information call our practice on **01332 294929** or email **farmandequine@scarsdalevets.com** 



## **Medicine Matters**

Welcome to our irregularly irregular column where we give you a run-down of what's hot and what's not, what's in and what's out, what's new and what's changed in the Scarsdale pharmacy department. Medicine names and brands seem to be in a constant state of flux, and we'll do our best to try and keep you up to date. Any questions about what you should use for what, or why your favourite product has disappeared off the face of the earth, just let us know and we'll do our best to answer!

#### Highlights for this month:

- One of our medicine suppliers has moved from daily deliveries to delivering 3 days a week on Mondays, Wednesdays and Fridays between 11.15am and 1.15pm. For the organised Olivers among you, you shouldn't notice any difference, but the last minute Larries might need to think ahead! Vaccines in particular will be affected - an order placed on a Monday will not be delivered until Wednesday lunchtime and an order placed on a Tuesday will be next day but not in time to go on a morning visit. We're hoping that clients will place their orders in time for things to run seamlessly...
- There was bad news on the doorstep from Zoetis, who sent us the following press release: "As you are aware, we have had manufacturing challenges with Tetra-Delta for several months now. We were hoping that the product would return to market later this year, however after lengthy investigations to establish a solution and secure ongoing supply we have made the difficult decision to discontinue the product with immediate effect." RIP Tetra Delta – you served us well.
- On a similar note, it looks like supplies of Gamaret, the Czech Tetra Delta replacement, might also be affected. The Veterinary Medicines Directorate (VMD) are seeking justification prior to issuing a Special Import Certificate (SIC) for Gamaret IM under Cascade legislation. It looks like it might be extremely difficult to justify applying for an SIC for Gamaret given the number of alternative, licenced lactating cow tubes now available, and certainly without antibiotic sensitivity testing that indicates Gamaret IM is the only suitable product. In summary, don't worry. There will be plenty of tubes available. They just might not be Gamaret.
- Mild panic ensued during a weekend power cut at Markeaton. Thankfully, all fridge medicines (e.g. vaccines, oxytocin, depocillin) were able to be transported under chilled conditions to Pride Veterinary Centre by a team of very dedicated vets who happened to be available, and the maximum/ minimum fridge thermometers showed that critical temperature ranges had not been breached. Phew!

## Events update

We've really missed seeing you all at our social events, quizzes and training courses over the past year and a half. We've got a lot of exciting things planned over the next few months and are excited about being able to meet up properly in person again! Watch this space for details of upcoming events, but to start with come and see us on our stand at the Brailsford Ploughing Match on Wednesday 6th October. We'll have giveaways, friendly faces and something educational for you to get your teeth into!

#### Farm and Equine Centre

01332 294929

01773 304900

Pride Veterinary Centre 01332 678333

### **Allestree** 01332 554422 **Shelton Lock**

01332 700321

## Stapenhill Stretton 01283 568162 01283 565333

## **Langley Mill** 01773 304914

## Mickleover Oαkwood 01332 518585 01332 666500

**Wollaton** 01159 676586

## Calf pneumonia and vaccinology

Calf pneumonia is multi-factorial, with the underlying disease often caused by a complex combination of both viruses and bacteria. The viruses involved in pneumonia (PI3, RSV, IBR and BVD) are responsible for causing damage to the upper respiratory tract (with the exception of BVD, which suppresses the calf's immune system's ability to respond to infections, leading to an increased risk of disease) which then allows secondary bacteria to enter the lung and cause further disease. If we can prevent calves from contracting these viruses in the first place through appropriate management, then we should be able to reduce the incidence of pneumonia in the herd.

One of these management practices is the use of vaccines. We have heard more about vaccines in the past year (in relation to COVID!) than we ever have done, and this has led to a better understanding of the principles of how they work. The vaccines that we have available to protect against calf pneumonia essentially prime the calf's immune system with antibodies so that should they meet the virus in real life, the antibodies are already present and should be able to neutralise the viral threat before it can cause disease – almost like soldiers on guard duty, on the look-out for threats. Once identified as a threat (the antibodies attach to the outside of the infected cell to mark them as infected), other cells in the immune system arrive which kill and safely remove the infected cell and virus.

This is why vaccination is no substitute for good calf management even if we vaccinate appropriately, a calf which has poor quality or a low quantity of colostrum may not be able to fight off disease due to an ineffective immune system. The same is true for a calf which is vaccinated, has had good quantity/quality of colostrum but is in the face of a massive disease challenge – the immune system may be working too hard already to effectivity respond to any new infections.

#### The key points about vaccination to remember are:

- Make appropriate vaccine choices by establishing what disease you have on farm and what you need to protect against. We can work this out by blood sampling home-bred, unvaccinated animals which are 9-12 months old – any antibodies that these animals have will be there because they have met that virus on farm recently. If you buy in calves through markets or from multiple sources then you may decide to protect against all of the main respiratory pathogens.
- Vaccinate at the correct time. If you are using intranasal vaccines against PI3 & RSV then they can be used from 9-10 days of age (depending on the brand you are using). Injectable vaccines (of which there are many vaccines available protecting against various combinations of pathogens) usually need two doses to provide full immunity. Exact timings differ depending on the individual vaccine – always look at the data sheet for details.
- Minimise other challenges to the calves. The more challenge that the calves face, the harder their immune system has to work and the less likely it is for the vaccines to be effective. Things that will challenge a calf could be the outside temperature – too hot or too cold and the calf will be using energy to keep warm/keep cool, food availability insufficient food or water access will impact on the calf's energy levels, disease challenge – calves housed in highly stocked, mucky pens with poor ventilation are much more likely to succumb to disease that those facing a lower level of challenge, and the status of the rest of the group – vaccinating some calves and not others will allow disease to circulate among the unvaccinated calves and increase the infection pressure on the vaccinated animals.

If you would like more information on preventing pneumonia in your herd please contact us at the practice. Keep an eye out too on our social media sites for upcoming pneumonia prevention meetings.

