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Getting downer cows back up

There was an excellent presentation at the recent BCVA Congress from Phil Poulton and Michael Pyman from Australia on downer cows. Their study looked at 218 downer cows from 96 herds in predominantly seasonal calving dairy herds in South East Australia (Victoria), and made some interesting observations regarding their treatment and prognosis.

The main initial causes of why the cows went down included calving paralysis (45% of cows), back injury (19%) and milk fever (12%). This initial reason for why they went down made no significant difference to their recovery.

What was much more important was that **84% of the downer cows had some sort of secondary damage**, such as muscle or nerve damage caused by lying for prolonged periods on hard surfaces. This was a critical factor in whether or not these downer cows got back up again: if there was **no** evidence of secondary damage, 57% of downer cows got back up again. However only 14% of those downer cows with secondary damage got back up.

The study also looked at the degree of nursing provided to the cows. **Optimum nursing care** included deep soft bedding material, protection from adverse weather, turning cows from one

side to another several times daily, access to good quality food and water, and lifting only if “effective” and supervised.

If the farms provided a decent quality of nursing care (which was judged as greater than half of the nursing recommendations followed), **43% of these cows recovered**. However if nursing care was deemed “unsatisfactory”, then only 6% of these cows got back up again.

Top tips for downer cow management include:

- Give downer cows appropriate and prompt treatment for their specific condition. The longer the cow stays down, the greater the chance of secondary damage developing.
- If the cow is not up within 6 hours, she must be fully examined by a veterinary surgeon.
- Give downer cows a through clinical examination to check for complicating issues.
- Give downer cows NSAID drugs (for example flunixin, meloxicam, ketoprofen) as directed by your vet. Their anti-inflammatory properties are just as important as their painkilling properties.
- High quality nursing care is critical for getting cows back up. Free access to food and water, soft grip surface such as deep straw, regular turning from one side to another – seemingly minor things – make a massive difference.
- The adage of “prevention is better than cure” applies equally to downer cows. Milk fever control and appropriate assistance at calving will stop cows going down in the first place.

DHHPS staff

We welcome Marissa Robson to the DHHPS in November, who is helping us out whilst Julie Forrest is away on maternity leave. She looks forward to working with you during her time with us.



DAIRY HERD HEALTH & PRODUCTIVITY SERVICE



Preventing calf pneumonia

With the winter months approaching, many will be starting to think about calf health again – particularly pneumonia risk. In the UK, the **average Age at First Calving is between 27 and 28 months**, which is still quite some way off the target of 24 months. The older heifers are at first calving, the less likely it is that they will calve into the herd for a second time, with reduced conception rates, increased risk of lameness and mastitis all working against these older heifers.

Unfortunately, we have a poor understanding of the factors in the UK that delay age at first calving. However, we do know that pre-weaning health and performance has a major impact both on disease risk, growth rates, fertility and productivity later in life. Recent work by the Royal Veterinary College (RVC) looking at 492 calves across England and Wales showed that around **48% of calves suffer from diarrhoea** in the first nine weeks of life, and around **46% of dairy calves suffer from pneumonia**.

What is interesting about this RVC data is that whilst the diarrhoea rates are comparable to those reported in other countries, our pneumonia rates appear to be the worst reported in the world. Now, being British, our first instinct is to blame the weather! Whilst ambient temperature is certainly an important risk factor for respiratory disease, there is much more that we could be doing to protect young

calves. Colostral antibodies provide limited protection against diarrhoea, but do significantly reduce respiratory disease risk. Having said this, the RVC study showed that 30% of calves with excellent passive transfer still suffer from respiratory disease.

Whilst vaccines certainly have a role in reducing the risk of pneumonia, many calves suffer from disease prior to the onset of immunity of many vaccines. Indeed primary bacterial pneumonias in these very young calves appear to be extremely common. Unfortunately, there are limited vaccine options for protecting against bacterial pneumonias.

Therefore, the focus must be on good basic practices such as diligent batch control, excellent hygiene and focusing on the calf's environment. **Mixed age groups of calves are a major disease risk**, and groups should be kept as stable as possible. Calves should never be dropped back a group if they are performing poorly. Whilst the published evidence for calf jackets is still patchy, the major association of ambient temperature with disease risk makes a compelling case for their use – provided that they are clean and fitted appropriately.

Milk replacer choice and feeding practices also make a difference. **Calves under three weeks of age have a limited ability to digest plant proteins**, leaving them at risk of malnutrition and scour when fed products containing a high proportion of plant proteins. Furthermore, feeding high concentrations of milk replacer will interfere with abomasal emptying, leaving calves at risk of abomasal bloat. Feeding increased volumes of milk may be more appropriate than increasing the concentration.

The DHHPS will be part of the Royal (Dick) School of Veterinary Studies stand at Agriscot 2017 on Wednesday 15th November at Ingliston. Please pop along to the stand and say hello if you are coming to the show.

Dairy Herd Health and Productivity Service, Division of Veterinary Clinical Sciences, Royal (Dick) School of Veterinary Studies, University of Edinburgh, EBVC, Easter Bush, Roslin, Midlothian EH25 9RG

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336

Tel: 0131 651 7474

Fax: 0131 651 7473

DHHPS@ed.ac.uk

www.ed.ac.uk/vet/dhhps 2