



Welcome to the winter edition of the Newsletter. In this edition Fraser discusses what to do with scanning results in sheep. Following housing, we've seen a bit of pneumonia in the practice, Paul discusses factors that can result in pneumonia cases on farm.

We would like to take this opportunity to wish you all a very Merry Christmas and a healthy and prosperous 2017.



Prevention of Calf Pneumonia

Why do calves get respiratory disease?

Calf respiratory disease is primarily caused by viruses (e.g. RSV, PI3, IBR) followed by secondary bacteria (e.g. Pasteurellae, Histophilus, Mycoplasma). Severe disease generally only occurs due to various other factors such as overcrowding, poor ventilation, wet or humid environments, mixing age groups, transport and low colostrum intakes.

An infection by a respiratory virus is common in young calves and, if they have had a good colostrum intake, a clean and dry environment and they are kept with calves of their own age, they will usually make a good recovery.

Depending on the virus, different areas of the respiratory tract can be affected. However common clinical signs are discharges from the nose and eyes, coughing, inappetance and a fever. Antibiotics are not effective in the treatment of viral infections.

If the calf is stressed (due to mixing or transport) or in poor body condition (due to poor colostrum intake, competition for food, damp environment) they are likely to develop bacterial pneumonia as a result of the virus infection whereby the bacteria take advantage of the lowered resistance of the calf to infect the lower airways (lungs).

Prevention of pneumonia is much better than treatment.

How can pneumonia rates be reduced in calves?

1. Ensure all calves receive good colostrum intake

Calves receiving enough colostrum are stronger and more able to resist disease. Guidelines for colostrum intake are: 2 litres in the first 2 hours, a further 2 litres in the next 6 hours and another 2 litres before 24 hours old.

2. Keep calves in clean and dry barns with good ventilation

Keep bedding dry and ensure good ventilation in the shed while avoiding drafts. Airflow through a shed should move from youngest to oldest animals.

3. Reduce stress as much as possible and try to limit to one stress at a time

Stress reduces the calf's resistance to disease making it more likely for a viral infection to develop into a bacterial one. Mixing, moving, weaning, management procedures (castration/de-horning) and concurrent disease are all likely to be stressful.

4. Ensure adequate feed space

There should be adequate trough space to ensure smaller calves are not being bullied for food

5. Isolate sick calves

Unwell calves should be moved to hospital pens for treatment and closer monitoring, once better they should be returned to their original group.

If buying in stock:

1. Keep calves in groups of the same ages and not overstocked.

Mixing different ages of calves must be avoided as the older calves are much more likely to be carrying pathogens (even if they appear healthy) which they can pass to the younger calves. Keep age groups together even if some are not growing as fast; avoid keeping smaller calves back to the next group. Keep calves in groups of no more than 20.

2. Isolate incoming stock

Bought in calves should be reared separately from home-bred calves, including avoiding the same air-space

3. Buy from a known source

Avoid buying from multiple different sources, e.g. through a market, as although they may appear healthy they could be carrying a variety of pathogens which could lead to an outbreak when the group is mixed and housed together.

What about vaccinations?

Vaccines are available for respiratory disease. However they are not recommended for use unless the management and environmental factors are improved as much as possible. The vaccines will not work in a poor environment or with stressed calves.

Before beginning a vaccination program it is wise to: firstly, ensure all other improvements have been made, using the above as a check list, and secondly, find out which particular infections are present on your farm. This will require a visit by a vet to take samples.



For more information on Calf Respiratory disease, please join us at the Royal (Dick) School of Veterinary Services for a client evening on Wednesday 18th January 2017.

Barren Ewes at scanning

With many flocks scanning in the coming weeks it is a good time to consider what can be done with the data gained at this time. Identification of a higher number of barren ewes at the time of scanning may warrant investigation to mitigate losses in subsequent years.

For most, a barren rate of less than 2% is acceptable, anything higher or an increase on previous years would warrant investigation. A variety of factors can result in high barren rates at this time, although it can be difficult to ascertain specific reasons at the time of scanning. However, identifying a problem enables investi-

gations into potential issues during the subsequent breeding season to be arranged.

Infectious agents, e.g. *Toxoplasma gondii*, can be involved in early embryonic loss and high barren rates at scanning in the UK. At present there is a subsidised blood sampling scheme available to test for some of the more common infectious agents.

Aside from infectious agents there are a number of ewe, ram and environmental factors that can be involved. We are keen to investigate any concerns you have in your flocks to help maximise production. Please contact the practice to discuss investigations and to arrange blood sampling ewes if appropriate.