

MONTHLY NEWSLETTER

PNEUMONIA PREVENTION

As cattle are housed for the winter months, it is time to start thinking about pneumonia prevention, and what information can be gathered when outbreaks happen. This time of year is the highest risk period for calves due to the associated changes with housing and stressors during this period. Therefore, being prepared and having a protocol in place can help mitigate some of the risk.



PREVENTION AND VACCINATION TIMING

- No vaccine can provide immediate protection, so forward planning to administer vaccines prior to housing is recommended. Depending on the vaccine used, the protocol will be different so please discuss the best approach for your farm with a member of our team.
- Review and improve ventilation and housing design before the next housing period, or plan which quick fixes can be made in the meantime. As a rule of thumb, there should be twice as much air outlet as inlet.
- Ensure adequate colostrum management to help provide key antibodies from the dam and give the calf a good start.



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INVESTIGATION

As the diagnosis is usually multifactorial for these cases we have to do further investigation before advising the best treatment course and future prevention, this includes:

- Deep nasopharyngeal swabs for PCR to identify bacterial (*Pasteurella multocida*, *Mannheimia haemolytica*, *Histophilus somni*, *Mycoplasma bovis*) and viral pathogens (BRSV, PI3, IBR). Most of these bacteria are naturally found in the respiratory tract of all animals. However when a virus is introduced it causes damage to the lungs, and the bacteria can multiply to cause more pathology.
- Blood samples for total protein/IgG to assess colostrum transfer and potential immune compromise. This highlights issues in colostrum quality or management, which is crucial for a good strong immune system in these calves.
- Post-mortem examination of any deaths for lung pathology, and sampling for bacteriology and histopathology.
- Contributing factors also include suboptimal ventilation and housing stress, so a quick analysis of the shed and advice from our team on potential changes and improvements can help to prevent spread. The Clyde team can use the RispAudit app for a structured approach to this.
- Additional tasks at housing such as weaning, dehorning, castrating etc. are the source of stress and place additional strain on the calf's immune system. Consider waiting a few weeks before carrying out these procedures if possible.

TREATMENT

- Use antimicrobial therapy based on known bacterial pathogens and sensitivity results. Using the correct antibiotic is key to effectively target infections.
- Don't forget to also include anti-inflammatory medication to reduce pyrexia and improve appetite. These drugs also reduce inflammation in the lung tissue, which, if present for a prolonged period, can produce areas of permanent damage. Animals with areas of this scarring have a reduced growth rate and will take longer to reach targets, which costs the business money via extra feed consumption.
- Supportive care is also important to ensure adequate hydration, feed access, and reduce other stressors to allow their immune systems to fight the infection appropriately.
- Where possible, isolate clinically affected calves to avoid spreading infection to others.

FOLLOW-UP

- Monitor treatment response and recurrence rates - sometimes initial treatment may not be effective and follow up injections or a different antibiotic may be required. If cure rates are low discuss with a vet about appropriate next steps.
- Reassess housing conditions and vaccination compliance before the next high-risk period - this can be discussed in your annual health plan with one of our team.

