Pneumonia in Calves

Calve pneumonia or the Bovine Respiratory Disease complex (BRD) is an important condition for all farmers who require their young stock to grow as quickly and as profitably as possible. The incidence and severity of disease varies a huge degree within different management systems but the fundamental requirements for infection are the same

The development of BRD in calves is dependent on the following;

- 1. Infectious Agents (Viruses and Bacteria)
- 2. Individual calf immune status and stress
- 3. Environment

All of the above can be identified measured and steps taken to manage them and therefore reducing the likelihood of disease.

Infectious Agents

There are several infectious agents associated with BRD one or all agents could be playing a part of pneumonia infections in your he9rd

- 1) Viruses;
 - a) IBR (Infectious Bovine Rhinotracheitis)
 - b) BRSV (Bovine Radial Syncytial Virus)
 - c) PIV3 (Parainfluenza Virus 3)
 - d) BVD (Bovine Viral Diarrhoea)
- 2) Bacteria;
 - a) Mannheimia haemolytica (formally Pasteurella haemolytica)
 - b) Pasteurella multocida
 - c) Mycoplasma species (M. bovis most common)

Calf Immune Status and Stress

- Ensure adequate colostrum (quality + volume) intake (4 l in first 6 -12 hours)
 - Can be measured by blood testing week old calves
- Adequate nutrition
- Other disease processes (parasites, scour etc)
- Reduced handling stress

<u>Environment</u>

Calves should be housed in an environment that meets the following criteria;

- Good ventilation (stack effect -see diagram vs mechanical ventilation)
- Clean and dry bed
- Avoid draughts
- Adequate stocking density
 - \circ Density suggested 4m² per 90 kg calf

CAN VACCINATE FOR ALL THESE VIRUSES !!

ANTIBIOTICS

SE VIRUSES !!

- Stock calves similar age and weight together
- Minimal dust
- Should smell fresh (no build up of gases)
- Stress free (plenty feed space, no stressful noises etc)



Diagram showing requirements of stack effect dose your shed fit??

- o Requires a minimal distance of 1.5 m between inlet and outlet
- The steeper the roof the more effective
- o Temperature gradient between interior and exterior required