

Calf Pneumonia

What is Calf Pneumonia?

Three viruses can result in calf pneumonia; Respiratory Syncytial Virus (RSV), Parainfluenza type 3 Virus (P13) and Infectious Bovine Rhinotracheitis (IBR – see separate fact sheet). These viruses cause permanent damage to the lungs even after recovery from pneumonia. This makes animals more susceptible to bacteria and mycoplasmas throughout their lifetime.

Calves over one month old tend to pick up these strains of pneumonia.

Calves under one month old can suffer exudative pneumonia caused by the bacteria *Actinomyces pyogenes* and *Pasteurella* species occasionally. Calves suffering severe neonatal diarrhoea seem to be at most risk.

Whilst pneumonia can appear in calves at any time of the year, but cases of calf pneumonia tend to start rising in October and peaking around Christmas time and again, less severely in late Spring. This is due to damp weather and the viruses and bacteria that can cause pneumonia spreading on water droplets in the atmosphere

Diagnosis

Chronic pneumonia is very common and in mild cases, occasional coughing may be the only indication that the disease is present. In severe cases, almost all the calves in the group may be suffering frequent bouts of coughing and breathing difficulties as the disease often spreads through every animal. Appetite may be unaffected but growth rate slows in calves with the disease. Temperature fluctuates daily and fatalities are rare.

Acute pneumonia (viral/enzootic pneumonia) usually arises from complications following chronic pneumonia although it can occur as a primary disease. The severity of the disease varies from animal to animal and tends not to spread as thoroughly through a group as chronic pneumonia. Stress can act as a trigger for this form of the disease. Mortality rates are usually low, around 5% with effective treatment, but the disease can reoccur several times, especially during winter housing.

Treatment

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Due to the long-term damage caused by pneumonia and the expense of treatment, prevention is certainly better than cure. This can be achieved through vaccination where a number of effective vaccines are available and which prime the calf's own defences against future challenges although will not provide 100% protection.

Reduced stocking rates, improved ventilation and avoiding mixing different age groups in the same airspace can also help prevent onset of pneumonia.

Swabs or blood tests to identify the virus responsible are often recommended before starting a treatment programme. Long acting and broad spectrum antibiotics are usually prescribed and in some cases will be accompanied by an anti-inflammatory.