

Respiratory Disease

RUMA guidelines emphasise good husbandry, but make no other specific recommendations. Viral causes dominate considerations for prevention and control.

Antibiotic spectra for calf pneumonia should aim to cover the common bacterial genera (*Mannheimia*, *Pasteurella*, *Histophilus/Haemophilus* and *Mycoplasma*). Synthetic macrolides are probably the narrowest-spectrum option here: Tilmicosin, Gamithromycin and Tulathromycin. Oxytetracycline, Florfenicol and Fluoroquinolones also cover these pathogens but with a broader spectrum of action.

The prevailing bacterial pathogens and resistance patterns for bovine respiratory disease will not be readily determined in the same way as for mastitis, and the primary causes will likely be viral in most cases. It is recommended to use non-steroidal anti-inflammatory drugs in all cases, this sometimes being the only treatment in milder cases.

- It is difficult to provide confident further guidelines, however Fluoro-quinolones should be reserved for unresponsive or severe cases.
- Oxytetracycline or the narrower-spectrum macrolides may be preferred as first-line choices.
- Penicillins do not cover mycoplasmas; whether this is significant in most cases is difficult to know. However, this spectrum gap and the need for daily injections (as opposed to the longer-acting macrolides) make them less attractive as first-line treatments.
- Florfenicol is broad-spectrum and shows cross-resistance with chloramphenicol, therefore logically it should be retained for less frequent use. Its combination with Flunixin makes its use convenient. However, the Flunixin is relatively short-acting, given the single-dose licensing, and farmers should consider the benefits of giving separate antibiotic and anti-inflammatory injections at appropriate intervals.