

MEADOW QUALITY

Livestock Trading since 1975

Mycoplasmosis

Mycoplasma is a genus of bacteria that lack a cell wall around their cell membrane. Without a cell wall, they are unaffected by many common antibiotics such as penicillin or other betalactam antibiotics that target cell wall synthesis. Several species are pathogenic in humans including *M. pneumoniae*, which is an important cause of atypical pneumonia and other respiratory disorders. *Mycoplasma* species are the smallest bacterial cells yet discovered and can survive without oxygen.

Mycoplasma Bovis

Mycoplasma Bovis is a pathogen causing respiratory disease, otitis media, arthritis, mastitis, and a variety of other diseases in cattle worldwide. It is increasingly recognized by the veterinary and livestock communities as having an important impact on the health, welfare, and productivity of dairy and beef cattle. M. bovis diseases can be difficult to diagnose and control because of inconsistent disease expression and response to treatments and vaccines.

Mycoplasma Bovis is pathogenic, persistent and often results in chronic disease.

Diagnosis &Identification

Diagnosis is difficult as 98% of calves carry it in their respiratory tract. Diagnosis is done by visual recognition of clinical signs other than in-vitro.

Arthritis, mastitis, joint ills, neonatal infection and pneumonia can have similar symptom



- Head tilt
- One ear falling down
- Nostril droop
- Will eat and drink
- Swollen joints, typically fetlocks or knees
- Tottering when walking
- Mycoplasma is slow to develop
- It can appear in older calves
- Respiratory issues

Where does it come from?

- Cows with mastitis
- Teat sharing
- Direct contact with bacteria, through mucus etc.

Treatment

Penicillin does not work on mycoplasma; it is worth changing to a broader spectrum antibiotic

- Early recognition is key
- Extended duration treatments
- Macrolides: long acting
- Tetracycline: Double course
- FQs not as effective
- Draxxin and Resflor work as both longer term anti-biotics

Post treatment some of the problems will remain although the animal is healthy. This is due to the nerve damage that has occurred. A dropped ear for example will stay that way.

Prevention and Reducing the Spread

- Record tag numbers and inform MQ (Grace) of any suspected cases
- Treat
- Maintain high levels of hygiene
- Keep it CLEAN!
- Clean teats once a day, preferably twice, and deep clean once a week
- Reduce animal stress
- Use isolation pens
- Avoid poor quality calves

Mycoplasma contamination

- Mycoplasma survives in biofilms such as dried mucus
- It will still be live for 2 months in milk at 4degrees C
- Lives in water troughs for 2 weeks
- Survives 37 days in manure
- Lives for a week on rubber

Not all disinfectants work, CHECK THE LABELS



