

# Keeping *Mycoplasma bovis* out



## What causes *Mycoplasma bovis*?

*Mycoplasma bovis* only infects cattle, although other *mycoplasmas* can affect different species. It is a very small bacterium without a cell wall, so it can evade the animal's immune system. Some infected cattle that are not able to fully eliminate infection become carriers. The organism's structure means that some commonly used antibiotics that act against bacterial cell walls are not effective and so treatment can be challenging with only a limited range of antibiotics suitable for use against it.

## How does *Mycoplasma bovis* affect an individual animal?

*Mycoplasma bovis* can cause respiratory disease in calves, arthritis and mastitis, either as a sole cause or in association with other organisms. Animals of any age can be affected.

Various stressors may cause carriers to start shedding infection, including other diseases (such as viral infections), fluctuating temperatures, heat or cold stress, over-crowding, transport, poor air quality or poor nutrition.

## How does *Mycoplasma bovis* spread and how might it get into my herd?

*Mycoplasma bovis* can spread directly or indirectly.

**Directly**, *Mycoplasma bovis* may be spread by contact as the bacterium is shed via all secretions from an infected animal, therefore spread can occur by:

- Close contact with an infected animal, including asymptomatic (apparently healthy) carriers
- Semen from an infected bull.

**Indirectly**, *Mycoplasma bovis* may be spread by:

- Aerosol transmission (leading to nasal exposure and infection of the upper respiratory tract)
- Ingestion by calves of untreated colostrum or milk that is infected
- Use of shared equipment eg at milking, leading to infection via the teat canal
- Contaminated material eg on hands, in feed or water.

## How do I stop *Mycoplasma bovis* from coming into my herd?

The most common source of infection is from the purchase of infected cows or heifers, so if purchasing, knowing the status of the herd from which the cattle are being purchased can provide reassurance.

- Key biosecurity principles:
- Keep a closed herd.
- Use risk-based trading principles when purchasing
  - Establish the herd health history
  - Buy from low SCC herds
  - Screen the herd or screen purchased animals and quarantine them on arrival Buy as few cows and calves from as few herds as possible.
- Don't feed waste milk to calves.