

Mycoplasma in heifers

Mycoplasma continues to be a frustrating disease in the dairy industry. In cows, several different species of Mycoplasma can cause mastitis, pneumonia, arthritis, abortion, and other disease syndromes.

In young animals, Mycoplasma may cause a range of disease syndromes as early as 2 to 3 weeks of age.

One of the most interesting facts about Mycoplasma is it is the smallest, free-living organism known to cause disease in animals. It is a unique bacteria in that it does not have a cell wall. This makes it resistant to some classes of antibiotics like penicillin and cephalosporin.

Mycoplasma bovis is the most common Mycoplasma pathogen to affect young dairy calves by causing pneumonia, conjunctivitis, ear infections, abscesses, and arthritis.

Route of Infection

So how do calves get infected with Mycoplasma? They can become infected:

- By coming in direct contact with the dam at birth,
- By drinking contaminated milk, nose-to-nose contact with other calves,
- By ingestion of the organism from contaminated nipples and buckets, and
- Through the environment.

Once the organism enters the body, it gets into the bloodstream where it can spread to different tissues causing disease. Conjunctivitis, head tilts, and droopy ears caused by middle ear infections are commonly the first signs of a Mycoplasma infection in young calves.

Often in severe cases the infection can spread through the blood into the joints causing polyarthritis. In heifer calves the organism can colonize in the mammary tissue causing Mycoplasma mastitis at or around calving.

Treatment of Mycoplasma-infected calves can be very frustrating because, due to the nature of the organism, many antibiotics are ineffective.

Tips for Prevention

Biosecurity and management are vital in control and prevention of Mycoplasma infections. Here are some important tips for prevention:

- Feed high quality, clean colostrum
- Do not feed milk from known Mycoplasma cows
- If feeding waste milk, pasteurize before feeding
- Minimize cow-calf contact

- Good ventilation in calf sheds
- All-in, all-out calf facilities

- Clean and disinfect hutches and sheds between calves or groups of calves
- Minimize calf-to-calf contact
- Provide a dry environment for calves

- Prevent contact between older sick animals and calves
- Clean and disinfect buckets, nipples, etc.

- Treat infected calves immediately upon diagnosis
- Consult with your veterinarian to be sure that your vaccination schedule for respiratory diseases is adequate.