



Streptococcus agalactiae mastitis

General notes:

- Cow associated mastitis pathogen that is generally spread within the milking parlour (teat liners, milkers hands etc.).
- Herds with a *Streptococcus agalactiae* infection generally have a high BMSCC (> 400,000 cells/ml).
- Infected cows have high ICSCC (often >1,000,000 cells/ml) and reduced production.
- Identify and separate culture positive and high ICSCC into another herd.

Control:

Milking shed:

- Ensure milking machine performance is at optimal.

Milking shed hygiene

- Ensure gloves are worn in the milking shed.
- Milk clean udders (if they are washed, they should be dried before cups are put on).
- Ensure all teats of all cows receive adequate coverage of teat disinfection post milking.

Mastitis treatment

- Generally, responds well to treatment – 90 to 95% cure rate (it is sensitive to all antibiotics including Noroclox – according to your mastitis culture results).
- Another approach to clinical and subclinical cases is to use an injectable antibiotic- Penethamate hydroiodide (Penethaject)- 15ml once daily into the muscle for 3 days- Milk WHP: 48 hours Meat WHP:7 days.
 - o By using an injectable we reduce the risk of transferring the bacteria to unaffected quarters of infected cows and to unaffected cows.

Managing a herd problem:

Options:

1. Assess high cell count cows to decide to dry off if in late lactation, cull or treat.
2. “Blitz” treatment the whole herd- all four quarters of all cows with and intramammary or treat all cows with an injectable course of antibiotics.
3. “Partial Blitz” treatment of the cows identified either by having high ISCCC or culture positive- treatment of all four quarters of all cows with and intramammary or treat all cows with an injectable course of antibiotics.

It is a good idea to use injectable antibiotics until the mastitis problem in the herd get under control to reduce the risk of accidentally spreading the bacteria from cow to cow in the shed.

Monitoring herd post treatment

- Perform a bulk milk tank PCR for *Streptococcus agalactiae* from the milking herd- to ensure these cows are free of the bacteria.
- Perform a bulk milk sample with the PCR test “Partial blitz/ high ICSCC herd” at the end of the milk withhold period.
 - o This can be done by taking a milk sample from the vat after main herd is milked and then again once “Partial blitz/ high ICSCC herd” has been milked.
- If the PCR results are negative for *Streptococcus agalactiae*, the two herds can be combined.
- If the PCR result is positive for *Streptococcus agalactiae*, treatment may need to be repeated.
- Recommended to perform a bulk milk PCR test ever 2-3 months for a further 2 to 3 times to ensure the herd is free of *Streptococcus agalactiae*.

Calving herds:

- Calving herds pose an interesting problem as the main herd could be clear, but a fresh cow can “bring” the bacteria into the herd again.
- It is recommended to keep all fresh cows separate and test groups every couple of weeks until 2 negative PCR results would then allow them to be put back into the main herd.

What do you do if you get a positive in the herd?

- It is best to start the process again- separating high ICSCC animals into a separate herd and test the main herd and “Partial Blitz/ high ICSCC” with the PCR test.

Reference: Parkinson, T. J., Vermunt, J. J., & Malmo, J. (2019). Diseases of cattle in Australasia: a comprehensive textbook. New Zealand Veterinary Association Foundation for Continuing Education. Massey University Press, Auckland, 0745, New Zealand