

Protecting your calves from Johne's disease - an important investment in the future

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What are the Johne's disease risks for a new born calf?

From the moment a calf is born the importance of good hygiene practices to minimise the exposure to dung and slurry from adult animals is vital to reducing the risk of infection. The ingestion of contaminated faeces is considered to be the main entry point for the bacterial organism (MAP- *Mycobacterium avium* ssp. *paratuberculosis*) which causes Johne's disease. Young calves have greater susceptibility to becoming infected with MAP than older animals. Apart from the risk of calves ingesting MAP from faecal contamination in their environment; a calf can also be infected while still in the womb or directly through colostrum from an infected dam.

Why is reducing the risks of MAP infection to a new born calf important?

The purpose of reducing the risk of infection in new born calves is ultimately to break the cycle of infection in the herd where calves infected in their early lives will in turn as adults will go on to infect their future calves on the farm. This means that effort put into protecting calves from infection in early life will ultimately pay dividends by reducing the risk to future generations.

How can the risks of MAP infection to a new born calf be reduced?

In order to reduce the risk of MAP infection for a newly born calf consideration must be given to:

- The environment into which the calf is born: ensure the calving area is well bedded and is as clean as possible to avoid dung contaminating any surfaces that the calf will come into contact with. It is also important to aim to have calving boxes thoroughly cleaned and disinfected between different cows.
- The cow: any cows which are test positive should be calved in a dedicated area away from the rest of the calves in the herd. It is also advisable that calves born to test positive cows are not bred as they are at a higher risk of being infected themselves. In terms of collecting colostrum from a cow, make sure that her udder is clean from faecal contamination and that the utensils used for collection are also clean. Calves should be removed from the calving pen as quickly as practical to an area where they will not be exposed to adult cow dung.
- The colostrum: calves should receive adequate good quality colostrum (1-2-3 of colostrum management) from their own dam but only if she is test negative. Indeed, colostrum and milk fed to any calf should only be from test negative cows. The practice of feeding pooled colostrum or milk to calves increases the risk of MAP transmission and should be avoided as much as possible. It is risky to import colostrum onto your farm from other sources. Thus it is best to plan and have your own colostrum available from known test negative cows, ideally those which consistently testing negative.

One of the main reasons why it is important to maintain a high hygiene standard around newly born calves, especially if infection has been proven in your herd (through a positive faecal ancillary test) is that apparently healthy but infected cows can shed MAP bacteria in their dung, colostrum, milk and pass infection onto their unborn calves. It is this cycle of silent spread of Johne's disease through a herd, which good calf hygiene and management practices can help break, protecting a valuable future investment in livestock.