

Winter housing and the control of Johne's disease

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As cattle are going into housing for the winter, there are a few measures that may be considered to improve both the control of Johne's disease and cow and calf health generally.

Cows that are high-risk for Johne's disease (JD) will ideally be removed from the herd, and the sooner this is done the less the risk of spread of infection. If retained, they should be housed separately from the rest of the herd, so that other cattle are not exposed to their dung. Although calves are much more susceptible to infection with Johne's disease than are adult cattle, adults can still be infected if exposed to heavy environmental contamination, such as sharing a pen with an infected and shedding cow.

You can use the herd health history to help identify high-risk animals, but this is best done by also using the results of testing under the Irish Johne's Control Programme. Apart from test-positive animals, high-risk animals are those that have shown clinical signs of Johne's disease (wasting in condition, severe scours, drop in production, bottle-jaw, and eventual death), calves (especially the most recent) from high-risk animals, animals bought from an infected source herd, and animals born into the same calf cohort as infected and other high-risk animals.

Animals which have had a positive or inconclusive ELISA test result for Johne's disease, followed by a negative PCR test result, should still be suspected of being infected. These animals, even in herds where infection has not been confirmed by PCR testing of dung samples, may have infection that has not yet progressed to being shed at detectable levels in the dung. They are treated by the programme as suspect, unless and until they have a negative ELISA test result in the next year's herd test, at which point they could then be considered to be low-risk.

In the sheds, provide a separate sick pen to hold animals that have mastitis, are lame, or are otherwise ill. These have higher risks of being infected with Johne's disease and of shedding MAP, the organism that causes JD, in their dung, contaminating their environment and putting other animals at risk of infection. In particular, do not use a calving pen as a sick pen to hold these animals. You may have to

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plan to install handling and treatment facilities in another pen or shed to keep your pre-calving and calving pens separate.

Cleanliness and hygiene during housing are very important in protecting your herd's health. Ensure there is a plentiful supply of fresh straw or other material to replace soiled bedding. Remove slurry and soiled bedding regularly to keep the cows clean, and wash the cows before they enter the calving pens.

Keeping cows and sheds clean will minimise calves' exposure to a range of infectious diseases that are spread by the faecal-oral route. These include pathogens that cause calf scour and other acute diseases (*Rotavirus*, *Cryptosporidia*, *Campylobacter*, *Giardia*, *Salmonella*, *E. coli*) and Johne's disease. Clean bedding and air will also reduce the risk of respiratory diseases.

You can also use your list of high-risk cows to plan your use of colostrum and transition milk. Do not feed these from high-risk cows to calves that you intend to retain or sell as breeders. Consider using a leg- or tail-band to help you recognise these animals to exclude their colostrum and milk.

Also consider using calf milk replacer, especially if your herd is infected with Johne's disease. Be sure to complete your pre-calving vaccinations to further reduce disease risk.

For more information on controlling Johne's disease risks and on managing calf health, refer to the AHI website: www.animalhealthireland.ie