

PREVENT JOHNE'S IN YOUR HERD

Liam Doyle, Johne's disease Programme Manager

Johne's disease (JD) is a bacterial disease of cattle and other ruminants for which there is no cure, caused by the bacterium *Mycobacterium avium* subspecies *paratuberculosis* (MAP). The most recent estimate of the prevalence of JD in Irish Dairy herds was made in 2016 and was estimated at 28% of herds. Due to significant changes in herd demographics, namely herd expansion post removal of milk quotas in 2015 it has been speculated that the most recent trends for JD are likely to be upwards. Other scientific work has also shown that if controls against the spread of JD are not implemented the outcome will be a trend of increasing herd prevalence over time. One of the issues with JD which makes its control difficult is that once animals become infected the disease progresses slowly and silently. Very commonly signs of JD won't become visible until an animal has had three or more calves and infection has at that point become established in the herd. All of this means that the key to avoiding the introduction of many diseases onto your farm, including JD is to always practice effective biosecurity measures; and when unsure take advice from your veterinary practitioner who has in depth knowledge of this subject area.

What are the main risks for introduction of JD onto my farm?

1. Movement of infected animals into the herd. Remember with JD infectious animals may appear healthy and may even have had a negative blood test for JD. However, these animals have the potential, even when they appear healthy to be releasing large numbers of MAP bacteria in their faeces into the farm environment, potentially beginning the process of infecting other stock on the farm, especially younger cohorts.
2. Introduction of colostrum onto your farm which may be contaminated with MAP. Colostrum can be a risk when it is harvested using inadequate hygiene or when it's collected from infected cows.
3. Slurry/manure (other than pigs or poultry) introduced from another farm on which MAP bacteria are present. This contaminated slurry/manure imported onto your farm risks contaminating your own pasture with viable MAP bacteria. Younger stock will be especially vulnerable to this infection route.
4. Animals that have left the home farm for variable lengths of time can be exposed to infection by grazing contaminated pastures or through contact with infected dung in off-farm heifer rearing units, or at shows and marts.
5. Workers/visitors coming onto your farm can spread infective dung on vehicles, equipment, boots and overalls as they move between herds, pay particular attention to vulnerable cohorts, namely calves and young stock.
6. Vehicles, trailers and farm machinery can introduce MAP contaminated dung to a farm and spread it throughout the farm as equipment is moved around.

How do I reduce the risks of JD entering my herd and infecting my cattle?

1. Reduce the number of herds and number of animals used to source introductions into your herd. If you are purchasing animals ideally source these from low-risk source herds. Low risk sources are closed herds or those which can demonstrate several years of test-negative Whole Herd Tests (WHT). Herds which are members of the Irish Johne's Control Programme (IJCP) can present a Herd Summary Report (HSR) which demonstrates their adherence to the programme requirements and summarises their historical test results (both diagnostic test results and results from their annual veterinary risk assessment (VRAMP)).
2. In terms of bringing colostrum from outside sources onto your farm this should be completely avoided unless from a high assurance source.
3. With slurry/manure it is best not to import this at all. If you do import slurry/manure avoid its use where young stock are grazed and if contractors come onto the farm, make sure vehicles are thoroughly cleaned before they gain access.
4. When moving stock to off-farm locations, avoid pastures where slurry has recently been spread. Check biosecurity practices of contract rearing units before sending calves/young stock.
5. In terms of workers coming onto the farm restrict access especially to calf areas, making sure anyone on farm is wearing clean clothing, disinfected before entry. If necessary, provide clean washable overalls and wellington boots to workers accessing your farm. Also make sure you have accessible cleaning facilities making it easy for workers to clean/disinfect boots and overalls. Signage may also be of use to provide information about staying away from restricted areas.
6. Ensure vehicles, trailers and machinery have clean external surfaces and internal surfaces have been washed before entering the farm. Remember machinery such as slurry/manure spreaders and dirty livestock trailers are of a particular high risk and should not enter the farm in a dirty state.
7. Minimise numbers of visitors and number of entry points to the farm. Establish barriers (e.g. gate) with biosecurity notice and disinfection points and foot baths at the main entry points to the farm. Maintain restricted access for visitors to vulnerable livestock such as calves.

For more information about preventing JD getting into your herd, speak to your veterinary practitioner or refer to the IJCP webpages, [Click here.](#)