Denial will not Help you Control Johne's Disease

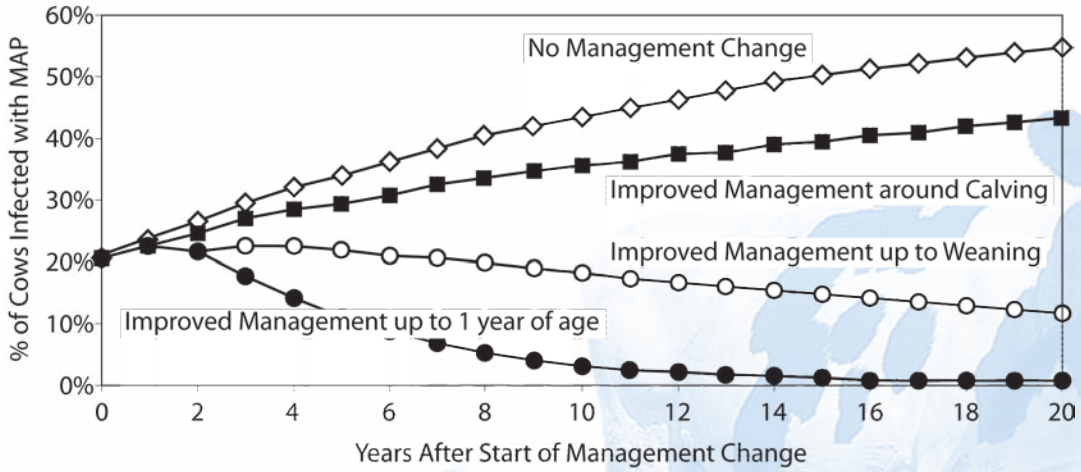
Source: Steve Mason, Research Associate

There is about an 80 per cent chance that you have at least one cow in your herd infected by the bacteria causing Johne's Disease (JD). Infected cows will be shedding the causative bacteria (MAP) in their feces, risking infection of your calves. You will not likely know which cows are infected and, even if you test all of your cows, you still will not be able to identify all of those that are infected because of the low sensitivity of the available tests. But not being able to identify MAP-infected cows is not a reason to assume your herd is JD-free. The better strategy is to assume you have infected cows and to take measures to minimize the risk of spreading JD to your calves.

It is thought that calves are most susceptible from birth to about nine months of age; research currently underway at the University of Calgary is aimed at determining whether this is correct. Although MAP-contaminated colostrum and milk are potential sources of infection, direct ingestion of the feces of adult animals are considered the main threat. So anything you can do to reduce the risk of contaminating the calves' feed and environment with cow manure will reduce their risk of JD.

The graph below illustrates how management can affect the rate of MAP infection. In a herd where no effort is made to reduce contamination of the calves' environment with cow feces, the number of animals infected with MAP will steadily increase. But, when calves are protected from exposure to MAP, significant reduction in the infection rate will result. And the longer the calves are protected from exposure, the more progress that will be made in reducing JD in the herd.

The data in the graph are from a study which also demonstrated that test-and-cull strategies without management changes were far less effective in reducing JD prevalence than management changes alone. Test-and-cull strategies such as the JD Herd Status Program, initiated by Alberta Agriculture in 1999, have proven to be very expensive due to the cost of testing. Their effectiveness is further hampered by the inability of current testing methods to detect all MAP infected cattle, especially those that have been recently infected.



source: Huybert Groenendaal, Western Canadian Dairy Seminar, 2005