

## Here's what we know about MAP infection:

- Calves less than 4 to 6 months of age are thought to be the most susceptible to infection when exposed to MAP.
- There is no treatment for JD and an effective vaccine has yet to be developed.
- Only a few infected cattle ever show clinical diarrhea and clinical signs of JD are just the 'tip of the JD iceberg'.
- In the later stages of infection, MAP-infected cows shed billions of MAP bacteria daily into the farm environment and pose a serious threat to replacement calves.
- MAP bacteria are difficult to kill and can survive in harsh environments for up to a year or longer.
- At least 50 percent of dairy herds contain infected cattle but this is likely an underestimation due to the poor sensitivity of current laboratory tests to detect infected cattle in the early stages of infection.



## WHAT ARE SOME ADDITIONAL BENEFITS OF CONTROLLING JOHNE'S DISEASE

An additional benefit to implementing BMPs on farm to reduce the risk of JD is the impact they will also have on controlling other diseases, such as salmonellosis and viral calf scours, infections that impact the health of calves and dairy replacements on many dairy farms.

### How does this initiative relate to the DHI Johne's disease testing option?

Producers are encouraged to work with their herd health veterinarian to use DHI Johne's disease test results as part of their on-farm risk assessment and to prioritize their management practices to reduce the risk and spread of Johne's disease.

### Is there any funding available?

Yes, funding is available to reimburse the herd health veterinarian \$200 for each producer's first on-farm Johne's risk assessment. The cost of the lab analysis of the environmental (manure) samples collected by the veterinarian is also covered.

### How do I get my Johne's disease risk assessment completed?

Call your eligible herd health veterinarian and set the date. One of the most convenient times is likely at your next health herd visit.

### Who can I call with my question or for more information about this Johne's disease initiative?

Producers are invited to call **Emily McDonald**, Industry Development Coordinator at Alberta Milk: (780) 577-3307.

[www.albertamilk.com/johnes.html](http://www.albertamilk.com/johnes.html)



# JOHNE'S HAPPENS.

## ALBERTA JOHNE'S DISEASE INITIATIVE

Dairy Herd Risk Management Program

## JOHNE'S DISEASE: WHAT IS IT?

Johne's disease (JD) is a production-limiting disease, just like mastitis and lameness. Affected cattle produce less milk, take longer to become pregnant, and are worth less when culled. The total economic impact of these production losses is dependent on the number of infected cows in the herd.

The cause of JD is *Mycobacterium avium* subspecies *paratuberculosis* (MAP), a bacterium closely related to those that cause tuberculosis in animals, and tuberculosis and leprosy in humans. This bacterium is resistant to most common disinfectants and can persist in the environment under moist conditions for at least a year.

## JD: WHY DO WE NEED A CONTROL PROGRAM?

Internationally, animal health agencies are increasingly concerned about JD and some are, or are contemplating, banning importation of animals from exporting countries without a JD control program in place. In today's shrinking world, market access is increasingly focused on non-tariff animal health issues with the potential to threaten the importing country's livestock industry or human population.



A clean calving pen and early removal of the calf from her dam will reduce the calf's risk of MAP infection.



Most dairy veterinarians in Alberta have received training in JD risk assessment and development of management plans.

## JD RISK ASSESSMENT

The Alberta Johne's Disease Initiative focuses on an on-farm JD risk assessment (JDRA), conducted by you and your herd health veterinarian. The JDRA is:

- Intended to identify those management practices that create or increase the risk that MAP poses to the herd.
- A detailed questionnaire designed to assist the veterinarian in evaluating the herd's management as it is related to the potential risk of MAP.

The veterinarian will also collect environmental (manure) samples at this time to help determine the provincial prevalence of MAP infection

The results of the risk assessment should facilitate an in-depth and herd-specific discussion of JD between the herd owner and the veterinarian so as to create a common understanding of the risk that MAP poses to the herd.

The herd owner and their veterinarian will use the JDRA to develop a farm specific JD management plan.

## JD MANAGEMENT PLAN

The JD Management Plan (JDMP) is simply a farm-specific plan of action agreed to by the herd owner based on the outcome of the discussion of the JDRA with his/her veterinarian.

In order to encourage successful implementation:

- Only one Best Management Practice (BMP) should be targeted and agreed to for implementation over the coming year
- This BMP must be one the herd manager agrees can and will be implemented.
- The most cost-effective BMP must be agreed to and forms the basis of the JDMP.
- If the herd owner insists on making more than one management change, a maximum of three BMPs may be targeted.



Isolation of calves can help to reduce their risk of MAP infection through fecal contamination of their feed and environment.