

Johne's Disease

Johne's disease is a contagious, chronic, and usually fatal infection that primarily affects the small intestine of ruminants. It is found worldwide. Signs of Johne's disease in cattle include weight loss and diarrhea with a normal appetite but are rarely evident until two or more years after infection. The causative bacteria is *Mycobacterium avium subspecies paratuberculosis* (MAP), and transmission is primarily fecal/oral to calves less than six months of age.

Based on the 2007 Dairy NAHMS study, about 68 percent of U.S. dairy herds have at least one cow that tests positive for Johne's with herd prevalence approaching 100 percent in large dairy herds. In the typical herd, for every obvious case of Johne's disease among dairy cattle on the farm, 15 to 25 other animals are likely infected. The clinical case represents only the "tip of the iceberg" of Johne's infection. Infected animals often shed the organism through feces even before they show clinical signs, which allows for continued, unnoticeable infection of herd mates.



Test purpose

- **Milk or Serum ELISA.** Determines infection status of animal by presence of MAP-specific antibodies.
- **Fecal PCR.** Determines the presence and relative concentration of MAP in manure samples.
- **Milk PCR.** Determines presence and relative concentration of MAP in pooled or bulk milk.

Use on

- Dairy and beef cows
- Sheep and goats

Sample types

	Price
Milk or Serum ELISA	\$6.50
Individual PCR Fecal	\$40.00
Individual Milk PCR	\$50.00
Pooled PCR (Fecal Min3/Max5)	\$12.00

Results

- ELISA
 - Available within five business days of sample receipt. Reported as positive, negative, or suspect.
 - Animals that are within five days of freshening have a high probability of giving false positive results when tested by ELISA because of the presence of colostral antibodies.
- PCR
 - Available within 10 business days of sample receipt. Reported as positive, suspect, or undetected.
 - Animals with a "suspect" result should be retested at a later date.

Testing strategies

- Test milk or serum at dry off or in early lactation.
- Test fecal samples at any time in animals greater than two years old.
- Screen with ELISA on serum or milk, verify positive animals with fecal PCR.

Begin testing

- Order sample collection supplies at mycentralstar.com or call 800.631.3510.
- Collect samples and send with submission form to:

*CentralStar Wisconsin Lab, 200 East Kelso Road
Kaukauna, WI 54130*

*CentralStar Michigan Lab, 1163 Comet Lane - Suite 100
Grand Ledge, MI 48837*



www.mycentralstar.com
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