

Should I Test for Johne's Disease?

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Develop a Testing Strategy With Your Veterinarian

Your veterinarian can develop a testing strategy based on your goals, and they will interpret the results.

Testing is useful to:

- Screen a herd for the presence or prevalence of Johne's disease.
- Confirm a diagnosis in an animal exhibiting clinical signs.
- Monitor and inform a Johne's disease management plan.

Examples of Goal-Directed Testing Strategies

Is this herd infected?

Testing of environmental or pooled fecal samples is the simplest and most cost effective way to establish herd status. Screening tests of each animal can be used to estimate what proportion is infected (that is, the herd prevalence). For most purposes the herd prevalence estimate from a risk assessment is adequate to inform the interpretation of subsequent test results.⁴

Is this animal infected?

To confirm a suspect or clinical diagnosis, use an organism detection test such as fecal culture or polymerase chain reaction (PCR). This is done when a cow has a positive ELISA (enzyme-linked immunosorbent assay) result during herd screening, or a cow is exhibiting clinical signs of the disease.

How are we doing with reducing herd prevalence?

Routine testing can be used to make decisions and track progress towards reduction and eradication of Johne's disease. The goal is to remove infected cows before fecal shedding occurs and clinical signs develop.¹⁴

Sources of Frustration and How to Cope

- Recognize that test results are sometimes inaccurate. False positive and false negative test results are possible. Work with a veterinarian you trust to interpret the results for your herd.
- Animals in early stages of infection may not mount an immune response or shed MAP. These animals will appear negative on all tests. These are false negatives.
- Passive shedding or "pass through" shedding can occur when uninfected animals ingest and excrete MAP in highly contaminated herds. These animals can be false positives. Some will become truly infected.
- Be patient. Monitor test results over time to assess progress.

Can the level of environmental contamination tell me how many animals are infected?

Greater environmental contamination can indicate that more animals are shedding or that a super shedder is present.

Establishing good management practices is key to controlling the spread of Johne's disease.

Develop a plan for introducing new animals to ensure risk to the rest of the herd remains low.

Testing at the herd or individual level is a tool to inform better management and culling decisions.

The perfect test may not exist, but available tests are adequate to successfully control Johne's disease with supporting management.



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