



Johne's Disease in Goats and Sheep

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Both goats and sheep can become infected with MAP (*Mycobacterium avium* subspecies *paratuberculosis*). Johne's disease symptoms can look similar to those of internal parasites in goats and sheep.

The primary clinical sign is chronic weight loss despite normal eating behaviors.⁸ Johne's disease may present with clinical signs in sheep and goats at a younger age than cattle, sometimes as early as 12 to 36 months of age.

Infection with Johne's disease weakens the immune system of small ruminants, which can also cause them to become infected with parasites.



Similar to transmission in cattle, Johne's disease is primarily spread via the fecal-oral route, in utero, or through milk and colostrum of infected ewes or does.¹³

Diagnostic tests used for cattle are not as accurate in small ruminants. ELISA (Enzyme Linked Immunosorbent Assay) tests are successful at identifying clinical cases in goats.

Management Recommendations

- Maintain a closed herd. Avoid buying new animals if possible.
- Purchase animals only from herds or flocks that test for Johne's disease and can provide herd status.
- Do not share rams or bucks without knowing the status of the animal or herd.
- Keep herds or flocks away from other species (cattle, wild ruminants) that could carry MAP.



Sources:

- Johne's disease in sheep and goats - <https://www.canr.msu.edu/news/johne-s-disease-in-sheep-and-goats>⁸
- Robbe-Austerman, Suelee. (2011). Control of Paratuberculosis in Small Ruminants. *Veterinary Clinics of North America: Food Animal Practice*, 27(3), 609-620. <https://doi.org/10.1016/j.cvfa.2011.07.007>¹³

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Johne's Disease Facts

Johne's disease is usually "purchased." Even a closed herd for many years may find that it harbors MAP.

Fecal-oral transmission is the primary route of MAP spread.

An amount as small as a thimbleful of manure can infect a lamb or kid.

Infected animals usually begin shedding MAP into the environment over a year before showing clinical signs.

Johne's disease is subclinical during its long incubation period. It is present but does not create noticeable signs.

Not all transmission routes can be controlled. Fetal infection is beyond a farmer's control. Focus on what can be controlled.



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