

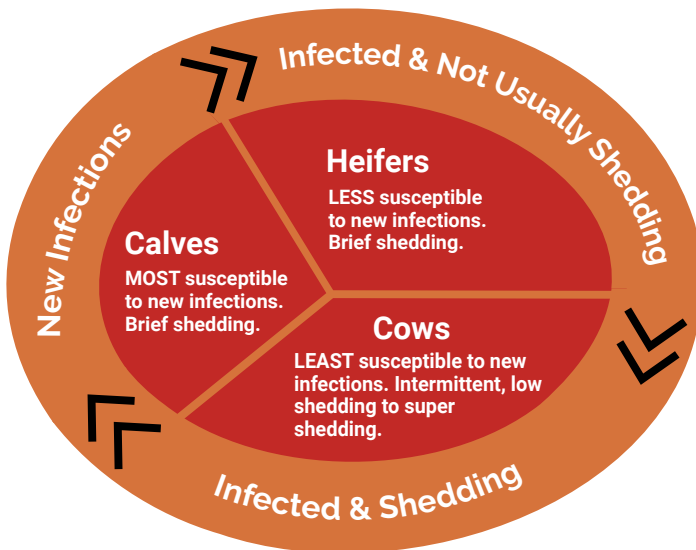


How Can Johnes Disease be Avoided?

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Understand the Cycle of Infection to Avoid New Infections

Johnes disease is cyclical. Infected animals shed MAP (*Mycobacterium avium* subspecies *paratuberculosis*) bacteria into the environment. New animals then become infected through ingestion of MAP bacteria present in the environment.



The diagram shows that in the cycle of Johnes disease, non-infected animals are exposed to MAP from infected shedding animals. As new animals are infected, they eventually begin shedding

Johnes Disease Can be Avoided

The best way to avoid bringing Johnes disease into a herd is to operate as a closed herd. However, if a herd purchases replacement heifers, cows, or bulls, caution must be taken when introducing new animals. When purchasing replacement animals, it is important to understand the limitations of available tests.

Herd screening tests can be helpful to understand herd prevalence of Johnes disease in the source herd. While an individual animal may test negative, it could be subclinically infected. A herd level positive test would indicate that the source herd has some level of infection, and purchasing replacements from this herd could put your farm at risk for introducing Johnes disease.

Calf exposure pathways:

- During gestation
- Colostrum
- Other calves shedding
- Cows shedding

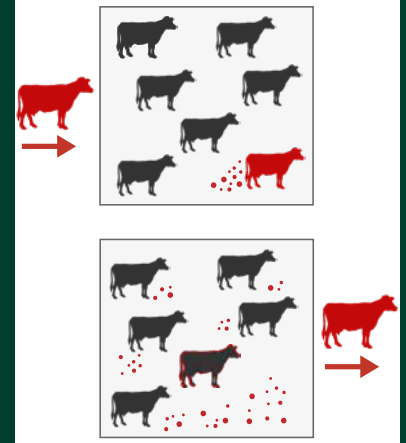
Heifer exposure pathways:

- Contaminated feed/water
- Other heifers shedding

Cow exposure pathways:

- Contaminated feed/water
- Other cows shedding

Johnes Disease Facts



Adding one cow can bring Johnes disease into a herd, but removing one positive cow may not remove Johnes disease from the herd.

A two-pronged approach is usually necessary to control Johnes disease:³

- Use management practices to limit transmission of disease, especially to calves and other youngstock.
- Determine whether a testing strategy is right for your herd. Using an environmental screening test to determine herd prevalence can be a good first step.



This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, through the Northeast Sustainable Agriculture Research and Education program under subaward number ONE22-416-AWD00000495. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Dept. of Agriculture.

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