

Johne's Disease

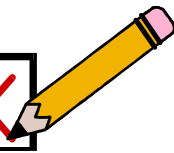
Whether or not your herd has Johne's Dis- ease:

- Calve in a clean dry place.
- Separate newborns from dams immediately.
- Raise all calves in facilities separate from adults.
- Prevent young stock from contact with mature cow manure and manure run-off.
- Do not use the same equipment to handle feed and manure.
- Prevent mature cow manure contamination of all feed and water, including standing run-off water.

- Feed high quality colostrum from low-risk, healthy or test-negative dams.
- Do not pool the colostrum; feed from one cow to one calf, if possible.
- Clean the udder and teats before collecting colostrum or milk for calves.
- Feed calves high quality milk-replacer in place of raw milk.

- Develop a plan with your veterinarian to reduce risk of spreading Johne's and other diseases at calving.
- Segregate any animal showing signs of chronic diarrhea and get a diagnosis quickly.
- Identify all Johne's test-positive animals and their offspring still in the herd.
- Remove or keep separate all Johne's test-positive animals.
- Cull clinical cases immediately or segregate from young-stock. Do not breed clinical cows.

**Good management =
Clean + dry**



Dairy Cattle Risk Checklist



To prevent manure contamination:

Yes

No

Do you:

- Calve in pens that are not cleaned between animals?
- Leave the calves with their dams?
- House youngstock and adults in the same facility?
- Let manure from adults contaminate calf facilities?
- Use the same equipment to move feed and manure?
- Have opportunities for manure to contaminate water sources for young-stock? Or do they have access to standing or run-off water?
- Feed hay and/or grain that has been contaminated with mature cow manure?
- Use waterers that can be easily contaminated with manure?

To reduce infection from colostrum or milk:

Yes

No

Do you:

- Use colostrum from unknown Johne's status cows for newborn calves?
- Pool the colostrum from unknown Johne's status cows?
- Collect colostrum from cows to feed calves without cleaning the udder and teats?
- Feed calves raw waste milk rather than milk replacer?
- Feed unpasteurized waste milk to calves ?

To Prevent Spread of Johne's from Infected Animals:

Yes

No

Do you:

- Operate your dairy operation without having a Johne's plan developed in cooperation with your veterinarian?
- Leave cows showing chronic diarrhea in the general population and obtain a diagnosis when it is convenient?
- Fail to identify Johne's test-positive animals in the herd and their offspring and integrate them into the herd management plan?
- Leave Johne's test-positive animals in the general population?
- Keep offspring of Johne's test positive animals in the production string and in the main facilities?
- Buy, rent or borrow replacement stock, including bulls?

Johne's disease in dairy cattle

Fast Facts

Cause	<ul style="list-style-type: none">✳ Bacterial infection that affects the lower small intestine of dairy cattle✳ Bacteria responsible is <i>Mycobacterium avium paratuberculosis</i> (<i>Map</i>)✳ Infection most commonly occurs when young animals ingest <i>Map</i>
Clinical Signs	<ul style="list-style-type: none">✳ Bacteria grow slowly inside the animal's intestinal cells✳ When present, clinical signs are delayed because of a two- to six-year or more incubation period✳ Signs of late-stage infection include:<ul style="list-style-type: none">~~ weight loss~~ intermittent or sudden unresponsive diarrhea~~ normal appetite~~ 'bottle jaw' - fluid under the jaw caused by protein loss~~ unthrifty✳ Most infections are subclinical but contribute to shedding of organisms through feces into the environment.
How it occurs	<ul style="list-style-type: none">✳ Herds are almost always infected by the additions of inapparently infected animals✳ Calves and immature cattle are most susceptible to becoming infected. Mature cattle develop some resistance to infection.✳ <i>Map</i> can infect animals in three ways<ol style="list-style-type: none">1. Ingestion of <i>Map</i> in manure from infected cows2. Ingestion of colostrum or milk from a cow in the late stage of infection3. Infection of the fetus from affected dams✳ Risk that an animal can transmit infection increases as the stage of infection progresses
Prevention and Control	<ul style="list-style-type: none">✳ Do not introduce infected animals into the herd✳ Institute preventive risk management practices✳ Identify infectious animals✳ Manage manure—no feces in feed, no adult feces near calves✳ Manage the risk in colostrum and milk to prevent transmission of bacteria to calves
Diagnosis	<ul style="list-style-type: none">✳ Fecal culture is the most accurate diagnostic test, but it is expensive and results take 8 to 16 weeks✳ Blood test (ELISA) is cheaper and quicker but not as accurate✳ Post-mortem culture of the lower small intestine✳ Testing regime and herd prevention plan should be determined in consultation with a veterinarian
NYSCHAP NY Johne's Herd Status Program (NYJHSP)	<ul style="list-style-type: none">✳ NYS Cattle Health Assurance Program herds can establish negative herd status through NYJHSP✳ Requires a systematic testing program to define herd status relative to Johne's disease✳ Three stages of participation, each based on a Johne's management plan.<ul style="list-style-type: none">~Stage 1 = Participating Stage. Herds have adopted best management practices for Johne's disease control within a herd plan.~Stage 2 = Control Stage. Herds have a testing component in addition to the herd management plans~Stage 3 = Document low risk infection by achieving one or multiple levels of Test Negative Herd Status in addition to the herd plan.
For more information contact the NYS Dept. of Ag and Markets at 518-457-3502	