What is Johne’s disease?

It is a serious wasting disease. Essentially, the intestine walls thicken and that prevents the normal absorption of food, thereby causing starvation of the animal.

There is no cure for Johne’s disease. However, there is vaccine that can reduce the level of infection on a property over time and grazing management can reduce pasture contamination and exposure of susceptible goats.

Animals become infected primarily when young but typically only start to look unwell later in life. This means that goats can be infected and excreting bacteria, and therefore capable of infecting others, for several years yet still look healthy.

Are goats susceptible?

Yes. In Australia, cattle, sheep, goats, deer and alpaca have been infected.

There are separate sheep and cattle strains of Johne’s – ovine Johne’s disease (OJD) and bovine Johne’s disease (BJD). These rarely, but occasionally, cross over (ie it is rare for cattle to get OJD or sheep to get BJD, but it does happen). Goats appear susceptible to BJD more often than OJD. Dairy goats or other goats that are managed intensively are more at risk of infection than extensively farmed goats – not because they are more susceptible but because they are more often in conditions where they are exposed to the bacterium that causes the disease.

Around half a dozen goat herds in Tasmania are known to be infected with Johne’s disease, but there are likely to be more that DPIPWE is not aware of. The disease is already endemic in parts of Tasmania in sheep and cattle and can spread from these species to goats.

How is the disease spread?

An infected goat can contaminate pasture and water with literally billions of the disease-causing bacteria, *Mycobacterium paratuberculosis* (commonly known as *Mptb* or MAP). An uninfected goat then ingests the bacterium and becomes infected. As noted above, it may be several years before that goat starts to look unwell, but it is capable of spreading the disease in the meantime.

Young goats can be infected by fecal contamination on their mother’s teats and, if the mother is in advanced stages of infection, from milk or even in the uterus. Again, it is important to understand that a doe can look healthy yet be infected (and infectious).

It is possible for goats to become infected by infected cattle or other susceptible species on the same property.

How do I know if my goats have Johne’s disease?

The first sign you are likely to see is weight loss, with or without scouring, in a goat over two years old. Importantly, as the incubation period is long, the disease doesn’t occur as an outbreak across the herd. Not all infected goats look unwell, so even the odd wasting goat might signify Johne’s disease.

If you have a goat or goats wasting away, the first possibility to consider is simply inadequate feed. Just having some cover on your paddocks is no guarantee that the goats are getting adequate nutrition. Unfortunately, some goats are expected to do well on hopelessly inadequate feed – especially in mid winter. If you have a wasting goat, act early by feeding it some good quality hay.

If the problem improves over a few weeks, it was likely to have been poor feed.

The second possibility to consider is worms. The simplest option is to do a worm test. It’s easy and inexpensive, and you get the lab test results in just a few days. Worm test kits are available from your rural merchandise store, your local vet or from DPIPWE. The kits are free and the worm test itself is (currently) $22.

If the results show a worm problem, you should treat it as such – in short, drench the animal with an effective anthelmintic and put it onto clean pasture. You should see an improvement in the goat in a few days. If not,
you should consult your veterinarian for a diagnosis. It may still be a worm problem, with the additional problem that the worms have become resistant to the type of drench you have used (known as “drench resistance”).

Goats that are unwell with Johne’s often get worms as well, so a temporary incomplete improvement in the goat’s body condition may mean that the worms have been removed but the Johne’s may still be progressing. If the problem was worm disease, that’s evidence that your worm control program isn’t working and you’ll need to work out why and fix it.

If the problem is not poor feed or worms, you should consider the possibility of Johne’s disease. The history of your goat herd might help here – where you bought your goats from in particular. But the only sure way of diagnosing, or ruling out, Johne’s disease is a blood test, faeces test or an autopsy on a suspect goat. So, if you have ruled out poor feed as the cause and there has been no improvement after the drench, call your vet.

Be careful when interpreting a negative Johne’s test result - one negative test does not rule out Johne’s disease. If cases continue to occur, get the test done again.

With cattle, diarrhoea usually accompanies the weight loss. In goats, diarrhoea may or may not occur, so don’t assume that absence of diarrhoea means that it’s not Johne’s disease.

What can I do to prevent Johne’s in my goats?

The most effective strategy is to minimise the risk of bringing Johne’s disease onto your property in the first place. If you have a closed herd (ie you don’t buy in, borrow or agist goats from other people), that provides the best form of protection.

If you buy, agist or borrow goats from someone else, you should satisfy yourself their herd is low risk of Johne’s disease. **Insist on a goat health statement from the other person.** Such a statement is not a cast-iron guarantee against Johne’s disease, but it does reduce the risk if you are provided with a statement that includes the Johne’s disease risk rating (ie their ABC score – see below) for the other person’s herd. **If the other person does not provide a goat health statement, you should not take the goat.**

If you bring any other susceptible species onto your property you should also ask for a similar health statement for them too.

If you lend or agist your livestock to someone else (ie you will be taking them back at some stage), make sure you assess the Johne’s risk of their property before doing so.

How is the Johne’s disease risk rating measured?

To help people assess the Johne’s disease risk on the property they are thinking about buying livestock from, an Assurance Based Credit (ABC) scheme has been developed. The property owner answers a series of questions about the risk of Johne’s disease on his/her property and each answer is given a number. The total number from all answers is the Johne’s disease risk rating. The higher the ABC score, the lower the Johne’s disease risk.

You should calculate the Johne’s disease risk rating on your own property. You should then only buy or agist goats from a property that has the same or a lower level of risk than your own property. In practice, this means only taking livestock from a property that has an ABC score the same as or higher than your own.

The Goat Health Statement has a specific section relating to the risk of Johne’s disease, using the ABC scheme. Advice on how to complete this section is printed on the reverse side of the Goat Health Statement. Please ensure you select only one option from each of section A and section B. If you need advice on which option applies to you, please contact your vet or DPIPWE.

If my goats were to get Johne’s disease, how would I manage that?

Management and eradication of Johne’s disease on your property requires a comprehensive plan. You should consult your vet for advice on a plan for your particular situation.

There is a vaccine available that can, over time, reduce the level of infection on your property. The vaccine works two ways – it reduces the onset of the wasting stage of the disease and it also reduces the amount of bacteria shed onto pasture by infected animals in their faeces. Your vet can advise on the use of the vaccine.

Please note that there would be some human health issues if you accidentally injected yourself with the vaccine, so you need to have the goat properly restrained when vaccinating. If you do inject yourself or have a needlestick injury you must contact a doctor.
immediately. For more information read the Material Safety Data (MSD) sheet that should be provided at the point of sale.

Keep your goats well fed, in good condition and maintain an effective worm control program. Goats that are robust and healthy are far more resistant to Johne’s disease.

You should remove any animals that are unwell with Johne’s disease, as they shed even more bacteria when they reach the wasting stage.

The disease-causing bacteria can survive on shaded pasture for at least several months. Grazing management can help reduce exposure of young goats to Johne’s disease:

- A pasture that has been resown is likely to have lower level of contamination
- Paddocks cropped or cut for hay or silage are effectively spelled, thereby reducing the level of contamination
- if handfeeding hay or pellets, do so off the ground (in troughs, racks etc)

You should advise your neighbours if you have Johne’s disease on your property as they may need to take steps to reduce the risk for their properties. At the very least, you should ensure your boundary fences are stockproof and ensure that your goats are not able to contaminate any water used by ruminant livestock on neighbouring properties.

If you have Johne’s disease in your goat herd, goats leaving your property should only go direct to slaughter unless you have vaccinated them and warned the receiver that your herd is infected.

**Where can I get a Goat Health Statement form?**


**Must I report Johne’s disease?**

Yes, you are required by law to notify DPIPWE if you suspect a case of Johne’s disease in any species. This allows DPIPWE to monitor Johne’s disease in Tasmania and it is also important if anyone wants to export goats from Tasmania to overseas countries.

The person in charge must warn anyone who receives goats from an infected property/herd of the risk of infection. This is best done through providing a copy of the goat health statement.

**Contacts**

To report a suspect case of Johne’s disease or for advice on a Goat Health Statement, please contact your vet or phone DPIPWE on 1300 368 550

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**Key points**

Goats can be infected, and be infectious, for several years before they start to look unwell. It’s not sufficient that a goat looks healthy before it comes onto your property – _always get a goat health statement from the owner before allowing the goat onto your property and make sure they have an ABC score the same as or higher than your own._

Johne’s disease is a herd problem. You can’t beat it by attending to just those animals that look unwell.

With Johne’s disease, prevention is far, far better than trying to manage it on your property.

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