



Johne's Disease - What you need to know

What is Johne's disease?

Johne's disease (pronounced yo-knees), also known as paratuberculosis is an infectious, contagious bacterial disease that is characterised by gradual wasting away, weakness with or without diarrhoea, loss of production early culling and mortality losses. It affects all ruminant animals, including sheep, goats and cattle and has worldwide distribution. Although many animals in a herd may be infected, usually less than 5 percent of infected animals will develop visible signs of the disease. Under circumstances of stress, inadequate nutrition or parasitism, more of the infected animals may develop clinical disease. Once clinical disease develops, death is inevitable.

What causes Johne's disease?

The disease is caused by *Mycobacterium paratuberculosis*, a bacterium related to the one that causes tuberculosis in humans, cattle and other species. The organism lives in the intestinal cells and lymph nodes, and passes out in the faeces. It can easily survive in manure and stagnant water for a year or more.

How is Johne's disease transmitted?

Infected animals pass large numbers of infectious bacteria daily with faeces, contaminating pastures, pens and watering areas thereby exposing other animals to infection. Lambs/kids may also become infected by ingestion of faecal material contaminating the udder, by in utero transmission, or by ingestion of contaminated milk.

How do I know if my animals are infected with Johne's disease?

The disease has a long incubation period and as a result,

most infected animals do not begin to show signs of illness until after 2 years of age. In heavily infected flocks, clinical disease may be seen in animals as young as 10 months of age. Affected animals show persistent weight loss that is unresponsive to medical treatment or improved nutrition. Such animals continue to eat and drink normally until they are too weak to eat or graze, and eventually die. Chronic diarrhoea is not a common feature of the disease in sheep or goats and is usually a terminal sign. Laboratory tests can confirm the presence of Johne's disease in clinical animals but are currently unable to detect the disease in the early (sub-clinical) stages of infection.

Why is awareness of Johne's disease important?

The World Organisation for Animal Health (OIE) classifies Johne's disease as one of its 'List B' diseases, or those "transmissible diseases that are considered to be of socio-economic and/or public health importance within countries and that are significant in the international trade of animals and animal products". Preliminary testing has confirmed the presence of Johne's disease regionally. This disease has implications for the small ruminant industry at both the national and international levels. Nationally, producers will be faced with production losses, additional management costs associated with culling and disposal of animals, loss of future genetic potential of stock, devaluation of stock and the social costs incurred directly to them as a result of loss of income. At the international level, there are implications especially with respect to the trade in small ruminant products. Having *M. paratuberculosis* positive herds can lead to a drop in demand and prices for small ruminant products, as well as to the increased imposition

