

UNDERSTANDING JOHNE'S DISEASE IN BEEF HERDS

WHAT IS JD IN CATTLE?

Johne's disease (JD) is an incurable infection of cattle, which causes wasting and chronic diarrhoea. It results in lost production and can end in the death of the animal.

JD is caused by a bacterium (Mycobacterium paratuberculosis) that lives mainly in the intestines of infected animals. It causes the intestinal wall to thicken and reduces the normal absorption of nutrients from grazing, so the animal can eventually starve to death.

There are two strains of Johne's disease present in Australia, cattle (C) strain and sheep (S) strain (bison strain has also been detected). Infection with C strain is more common in cattle but they can become infected with S strain, probably as a result of co-grazing with JD infected sheep.

ABOUT THE DISEASE

The bacteria causing JD are tough and can live for a long time in the environment.

Research in southern Australia shows that heat and sunlight destroy the bacteria causing JD and that under normal summer conditions in paddocks and waterways around 90% of the bacteria die within six weeks. However, in the right conditions – moist, shaded areas – the bacteria can survive for longer than 12 months.

WHAT ARE THE SIGNS OF JD IN CATTLE?

The most common signs are chronic diarrhoea (scouring), wasting and eventual death.

While most cattle are infected as calves and they may not show any symptoms of JD for many years, they are still likely to excrete the bacteria before developing clinical signs. And though the numbers of infected cattle in a herd may start out low, the rate of infection can increase significantly if JD is not controlled. Visibly sick and dying animals can cause animal welfare issues and reduce production.

Clinical cases of JD occur occasionally in infected herds, if left uncontrolled the rate of infection can increase.

JD can cause significant mortality and reduced productivity, particularly in intensive management systems.

It is recommended to take the necessary steps to eliminate JD from infected beef herds to ensure the welfare of the herd, maintain optimum productivity and maximise marketing opportunities.

However not all infected cattle show these signs.

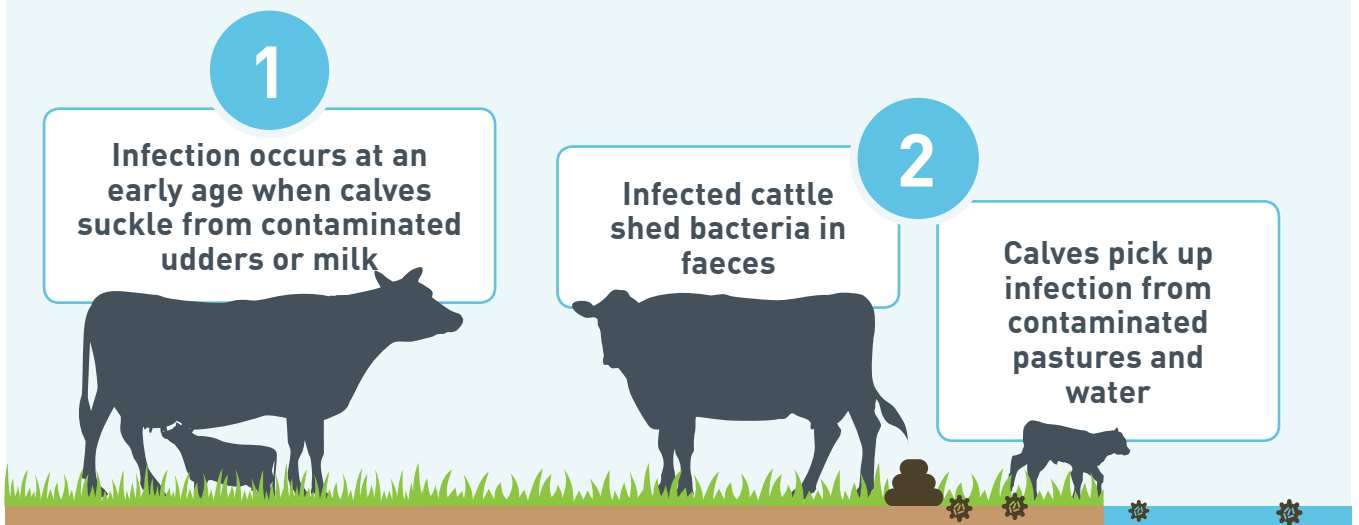
Some animals just fail to reach their full productive potential.

JD occurs in more dairy herds than beef herds. The number of beef herds known to be infected with JD in Australia is very low, with the disease occurring more frequently in the south eastern states.

HOW IS JD SPREAD IN CATTLE?

Animals usually become infected at a very early age and pick up the infection as they eat or drink from contaminated pastures, water and udders, or from contaminated milk of infected cows.

In situations where there is a high pasture contamination level older animals may become infected. Some infected animals are capable of shedding billions of organisms in their faeces on a daily basis.



WHY PREVENT JD IN BEEF HERDS?

If JD is introduced into a beef herd the impact on a business can be severe, particularly for producers selling breeding animals. The reputation of seed-stock producers can be damaged if animals that have been sold to clients are subsequently found to be infected.

Once established in a herd, JD is difficult to eradicate, so prevention through biosecurity practices is a sound investment. JD enters a herd through the introduction of infected animals either by purchasing or agisting infected stock.

Australia's low prevalence of JD in beef herds is recognised internationally. Since large parts of

Australia and the majority of beef herds are free of JD, it is worth investing in a property program that continues to protect this desirable animal-health status and reduces the risk of disease spread.

Taking no action to control and maintain the level of infection in Australian beef herds at very low levels has the potential to undermine Australia's reputation as a supplier of premium beef products on world markets.

Several of Australia's major markets and competitor countries require certification for JD status and have JD control programs, so infected herds could be excluded from particular markets that require certification of absence of disease.

For more information visit:

www.agriculture.gov.au/export/controlled-goods/live-animals/livestock