



Victorian Farmers Federation Livestock Group

Livestock Factsheet

» Theileria

What is Theileria?

Theileria is a microscopic blood parasite that is usually carried by ticks. The species of Theileria that affects Victorian cattle is *Theileria orientalis*, causing oriental theileriosis. The parasite multiplies in white and red blood cells, leading to their destruction and thereby causing sickness and death in the affected animals.

Theileriosis is not a notifiable disease, however conditions such as East Coast Fever, Mediterranean Fever and Tropical Theileriosis, which are caused by other *Theileria* parasites are exotic, with serious impacts to the cattle industry. Theileriosis caused by *Theileria orientalis* is not a zoonosis (does not affect human health).

Research regarding *Theileria* is currently occurring in Victoria as there have been a significant increase in clinical cases and deaths in recent years.

How does it spread?

Ticks inject the *Theileria* parasite into cattle via their saliva. In Victoria, *Theileria* is considered to be spread by bush ticks and/or introduction of infected animals from an endemic area. It may also be spread via standard husbandry practices that include blood transfer (such as using needles on multiple animals) and across the placenta. Bush ticks only transfer *Theileria* to cattle, not other species.

How it can affect your herd?

Clinical signs of theileriosis include:

- Anaemia
- Lethargy (lack of willingness to walk)
- Weakness
- Fever
- Jaundice (yellowing/pale gums)
- Increased heart rate
- Difficulty breathing (gaspings if forced to run)
- Drop in milk production
- Abortions
- Still birth
- Dystocia
- Death

These signs may vary, or may only be observed in:

- Pregnant animals
- Young animals (less than 6 months of age)
- Introduced animals (that have previously been unexposed, and are therefore susceptible if *Theileria* is present in your area)
- After animals have recently been introduced into your herd (from areas where *Theileria* is present)

As these signs are often symptomatic of many other conditions, it is important to confirm diagnosis via a blood sample taken by a veterinarian. It is important to take this sample early in the infection, as the spleen will remove parasitised blood cells and compromise the diagnosis.

There are no specific subsidies currently available. However, if theileriosis continues to be a significant problem, it may be approved as a significant disease event under the Victorian DPI Significant Disease Investigation (SDI) program, a number of subsidies may become available.

Management Tools

Treatment

Currently there are no specific treatments for theileriosis registered in Australia; however attempts have been made to treat and minimise the symptoms with varied rates of success. If you suspect theileriosis in your herd, the best course of action is to contact your veterinarian to do appropriate blood testing, and then devise a treatment program.

It is important to record treatments for all drugs, drenches and vaccines applied to your animals. This is also important with theileriosis, especially considering some of the drugs that have been previously used to treat symptoms have significant withholding periods and/or export slaughter intervals.

Prevention

There is currently no vaccine available for theileriosis; however there are other tools that producers can employ to attempt to prevent an incursion in their herd:

- General biosecurity principles such as avoiding importing animals into your herd from known infected properties
- Consider using insecticides to minimise tick burden in your herd, and also grazing susceptible paddocks with other species
- Avoid stressing animals that you suspect of being infected with theileriosis to prevent compromising the movement of oxygen in their body any further. This includes avoiding too much movement and ensure they have adequate water and good feed available to them.

For further information, please contact the VFF Livestock Group on 1300 882 833 or by email to Charlotte Fox on cfox@vff.org.au.

Further Links:

DPI Victoria: <http://www.dpi.vic.gov.au/agriculture/pests-diseases-and-weeds/animal-diseases/beef-and-dairy-cows/information-on-benign-theileriosis/benign-theileriosis-in-victoria>

DPI New South Wales: <http://www.dpi.nsw.gov.au/biosecurity/animal/info-vets/theileria>

Meat and Livestock Australia: <http://www.mla.com.au/About-the-red-meat-industry/About-MLA/News-and-media/Industry-news/Fighting-theileria>

Tamworth Veterinary Hospital: <http://tamworthvet.com.au/AnimalCareandInformation/LargeAnimalCareandInformation/TheileriosisInCattle/tabid/26290/Default.aspx>



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Take Home Messages

- Theileria is a parasite that causes theileriosis in cattle
- The parasite can be introduced to cattle by tick bites
- Cattle with theileriosis can suffer anaemia, fever, abortion and even sudden death
- Currently, no vaccines or treatments are available for theileriosis



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