

# Fact Sheet: Bovine Torovirus P2f Infectious Diseases

August 2025

# **Bovine Torovirus (Breda virus)**

Bovine Torovirus (BoTV) – also known as Breda virus – is recognised as a cause of scours in young calves and may also affect the respiratory tract.

It mostly affects calves 1-6 weeks old but there is widespread antibody presence in adult cattle.

This virus is widespread in cattle herds globally.

# **Clinical signs**

The most common signs are diarrhoea, dehydration and weakness, especially in calves under 3 weeks old.

The virus has also been found in nasal secretions of calves with respiratory symptoms.

#### **Transmission**

Calves catch BoTV from other infected calves, via faeces, and possibly through the fluids in the nose and mouth.

### **Treatment**

There is no specific antiviral available for Breda virus. Follow standard care practices for calf scours: hydration and supportive therapy.

# **Control and prevention**

As there isn't a vaccine available, control and prevention relies on hygiene, colostrum intake, and minimising stress in calves.

## **Diagnosis**

Bovine Torovirus (BoTV) is an RNA virus in the *Coronaviridae* family. Samples from faecal or nasal swabs can be used for RT-PCR and ELISA tests.

The virus is hard to culture; only one strain (Aichi/2004) has been isolated in lab.

#### References

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# **Key points**

- BoTV (Breda virus) is detected in both gut and respiratory tracts.
- It is commonly found with other gut and respiratory bugs but can act alone.
- The fact that many adult cattle have antibodies suggests they were exposed to the virus, likely when they were young.
- There is no vaccine available.
- BoTV is still under investigation, with ongoing studies to clarify its full impact on calf health.

# Microbial surveillance in dairy cattle

This series of fact sheets has been prepared for cattle vets. It covers a range of microbes that were identified by Dairy UP team in samples collected from cattle on NSW dairy farms in 2023 and 2024. As many of these viruses are new, and knowledge about them is still emerging, we have collated current knowledge as a handy reference.

# About Dairy UP

<u>Dairy UP</u> is a research and development program to help NSW farmers unlock the potential of their dairy businesses. Led by the University of Sydney's Dairy Research Foundation, Dairy UP is delivered through NSW DPIRD, Scibus, Dairy Australia, and the University of Sydney.

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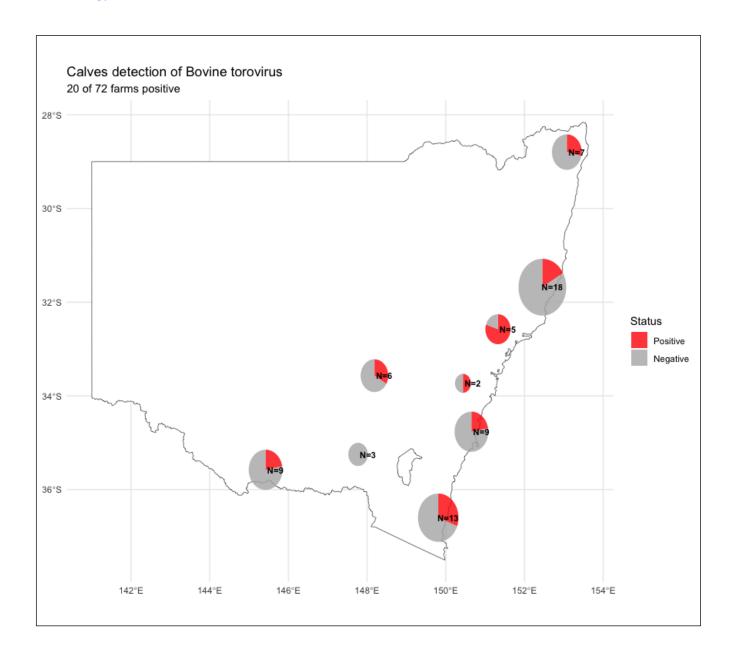
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# More info

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#### Partner organisations















# Additional program supporters, collaborations or partnerships

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