**Theileria and anaemia in cattle**

**Cases of cattle being affected by Theileria orientalis Ikeda,** which causes anaemia, *have been on the increase since late 2012, particularly in the Upper North Island.*

### Susceptible times

Calving cows have a changing requirement for energy as they transition to milking and this, along with changes to the immune system, makes them more susceptible to the infection.

Young calves (2-3 months) and recently calved cows are also more susceptible.

Cattle are also at risk of infection when moved to areas where ticks are present. Likewise, if infected cattle are transported, they can spread infection to ticks in the new location.

### Slowing the spread

Theileriosis is caused by a parasite transmitted by ticks when they feed on the animal’s blood – it is not passed on by cow-to-cow contact.

At an individual herd level, impacts from Theileriosis are likely to reduce over time as cattle build up immunity.

### Prevention

- Regularly check all classes of stock for ticks. Look for them around the tail head, base of udder and inside the legs.
- Apply a tick control product specifically for cattle, following the advice of your veterinarian and product instructions.
- Quarantine new stock coming on to your farm for seven days, observe them and treat for ticks (if necessary).
- Keep animals in good condition and well fed so they are better able to cope with disease challenges and stressful events.

### Signs of anaemia

- Cows straggling on the walk to the shed.
- Increased respiratory and heart rate.
- Pale, rather than healthy pink, vulva (FANI test).
- Pale udder, yellow eyes.
- Cows have no strength or energy to do anything.

**Signs of anaemia caused by Theileria are more likely to be seen:**

- around calving time
- in calves from weaning to about 6-7 months of age
- if animals are already sick or coping with some other health challenge
- potentially at mating time.

### Treating affected cattle

- Minimise stress and movement of affected animals.
- Give affected animals easy to eat, high quality feed and plenty of water.
- Handle the affected cattle only when necessary.
- Treatments are available. Contact your veterinarian.

### Diagnosis

**Theileriosis is confirmed by carrying out blood tests. These will show:**

- the severity of the anaemia
- the presence of Theileria in red blood cells (blood smear test)
- the strain of Theileria present (a laboratory test is now available from several providers).

### Further advice is available

- From your veterinarian
- dairynz.co.nz/theileria for all factsheets
- 0800 4 DairyNZ (0800 4 324 7969)
### Seasonal Theileriosis management

**Dry off**
- **Risks**
  - Low tick activity.
  - Cows off-farm pose a risk: understand the health status of stock before they return to the farm.
- **Actions**
  - Understand Theileriosis risk of winter grazing properties.
  - Assess health of stock from source farms.
  - Quarantine stock on arrival. Observe for signs of disease.

**Calving**
- **Risks**
  - High risk of infection.
  - Cows and heifers at high health risk.
- **Actions**
  - Quarantine stock on arrival. Observe for signs of disease and ticks, and treat (if necessary).
  - Reduce stress on cows as much as possible.
  - Supply enough good feed.
  - Monitor calving cows.
  - Monitor main herd for ticks (nymphs) and treat (if necessary).

**Mating**
- **Risks**
  - High risk of infection.
- **Actions**
  - Monitor for ticks (nymphs and adults).
  - Treat for ticks.
  - Monitor weaned calves.
  - Understand Theileriosis risk of grazier/run-off properties.

**Late lactation**
- **Risks**
  - High risk of infection.
- **Actions**
  - Monitor for ticks (adults) and larvae in autumn.
  - Treat for ticks, especially if rain comes after a dry period (there will be a large surge in tick activity). Treatment will control egg laying and next year’s tick population.
  - Understand Theileriosis risk of winter grazing properties.
  - Use hygienic procedures and clean needles for vaccinations.

At any time of the year, if animals present with signs of anaemia, a veterinarian should be consulted.

For more information and fact sheets on Theileriosis, [dairynz.co.nz/theileria](http://dairynz.co.nz/theileria)
or phone 0800 4 DairyNZ (0800 4 324 7969).

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**Mid-Upper North Island**

**North of Taupo**
- May-June

**Lower North Island**

**South of Taupo**
- May-June
- July-September
- October-December
- January-April

**South Island** – there is no immediate risk of Theileriosis, unless introducing cows from the North Island. In this case, check cows for Theileriosis status before transport.