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# Rhodes Vet Clinic

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Newsletter

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## We provide:

- Surgery & Medicine for small and large animals
- Herd Health Advice
- Soft Tissue & Orthopaedic Surgery
- Dentistry
- Digital X-ray
- Ultrasound
- In House Blood Testing
- Nutrition
- Prescription Diets
- Microchip Identification

## Recognising Nitrite Poisoning

**Nitrite poisoning** can look a lot like milk fever .... The cow is usually sitting down and may have a wobble when she walks.

**How to tell the difference:**

1. Salivating a lot
2. Gums will be a brown colour (as will her blood)
3. Trouble breathing (short shallow breaths)

Make sure you check your down cows before milking as they will likely be dead by the time you have finished milking if they are suffering from nitrite poisoning.

**What is nitrite poisoning?** (the scientific part)

Nitrite causes changes to the red blood cells. It converts the oxygen carrying molecule from haemoglobin to methaemoglobin, which is unable to carry oxygen. This means the cows are unable to get oxygen to their cells and brains, which is incompatible with life!

**What's the difference between nitrite and nitrate and why does nitrite toxicity occur?**

Crops such as brassicas (regrowth rape, turnips, capeweed) and fertilised/frost pastures can have high nitrates. The bacteria in the rumen rapidly converts the nitrates in these crops to nitrite, which is then converted into ammonia which the cow uses. When there is an excess of nitrate available it gets converted to nitrite much faster than the rumen can convert nitrite to ammonia. This excess nitrite gets absorbed and nitrite poisoning occurs. Maximum blood nitrite levels are reached approx. 5 hours after eating the nitrate. How severely affected a cow is depends on how much she has eaten.

High levels of nitrate accumulate in plants when their growth is limited by "energy", typically overcast dull days and after plants have experienced stress eg: frosts, freezing, insect damage, herbicides, drought. Other causes include over application of inorganic nitrogenous fertilisers / farm effluent. After fertilisation it can take up to 6 weeks for nitrogen levels in brassica crops to return to safe grazing levels.

**Prevention:**

.. Never put hungry stock straight onto crop (especially regrowth) or fresh short pasture that has recently been fertilised or stressed (frost). Fill them up with hay first. Crop is best fed in the afternoon as nitrite risk is highest in the morning

.. Adequate carbohydrate (sugar) in the diet. This helps as it alters the pH of the rumen and reduces the rate that the nitrate is converted to nitrite. Raw sugar can be added to the feed in the bail where nitrite is a concern but be careful not to cause acidosis

**To discuss your individual situations please call the Clinic on 5232 2111.**

**What to do if you think your cows have nitrite poisoning: Ring us!**

**Simpson Office:**

Our Simpson Office is open  
Monday, Wednesday, Friday  
10am to 3pm  
P: 03 5594 3257

**Colac Office:**

Our Colac Office is open  
Monday to Friday  
8am to 6pm  
Saturday 9am to 12 noon  
www.rhodesveterinaryclinic.com.au

**We are available 24/7  
for emergencies.  
Our emergency number  
is:  
5232 2111**

# Bloat (Gastric Dilatation — GDV) in Dogs



Bloat is a sudden swelling of the stomach with air. It is rapidly fatal if untreated. The bloat can progress to a twisted stomach. The technical name for this condition is Gastric Dilatation and Volvulus — GDV. This condition is most common in the large and giant, deep chested breeds such as Great Danes, Weimaraners and German Shepherds. An incident rate for large and giant breeds has been reported around 6%.

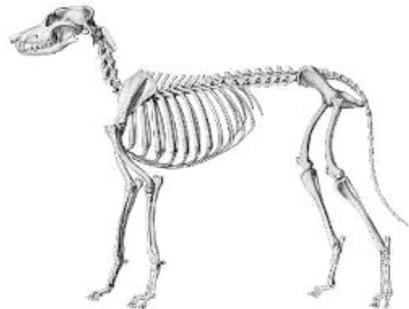
GDV can occur at any age. It is sometimes associated with eating a large meal immediately before or after exercise. Sometimes there is no explanation for why the bloat has occurred. As the stomach begins to expand rapidly the pressure in the stomach increases.

The increased pressure and size of the stomach may have several severe consequences including:

- Prevention of adequate blood return to the heart from the abdomen
- Loss of blood flow to the lining of the stomach
- Rupture of the stomach wall
- Pressure on the diaphragm preventing the lungs from adequately expanding leading to decreased ability to maintain normal breathing
- Twisting / rotation of the stomach leading to blockage of blood supply to the spleen and the stomach
- Shock due to effects on the entire body

Signs of bloat include:

- Vomiting progressing into dry retching
- Hunched in the abdomen
- Rapidly expanding abdomen
- Distress
- Trouble breathing
- Collapse



Skeleton showing the shape of a deep chested dog

Treatment:

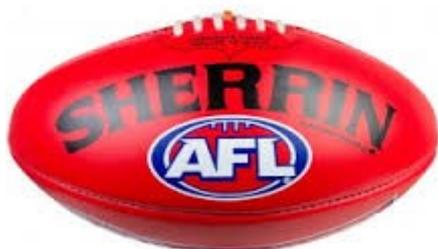
- Rapid emergency veterinary treatment is essential
- Pain relief
- Decompression (release the gas from the stomach)
- Supportive treatment—intravenous fluids
- Surgery to untwist the stomach. The surgery is high risk and has a low success rate



Prevention:

- Soaked dry food in a “Slow feed” bowl
- Two or three smaller meals rather than one large one
- Don't feed before or after exercise
- Gastroplexy

Rhodes Veterinary Clinic now offers a surgery called “gastroplexy” which is where the stomach wall is attached to the body wall to prevent the stomach twisting in the event of the dog bloating. This can be done at a moderate extra cost at the time of routine desexing for breeds at high risk of bloat. Studies have shown this to be beneficial and lifesaving for high risk breeds.



## RVC Football Tipping Update:

It is a very close competition this year!

1. Kosta 96
2. Tom 95
3. Cindy 94
4. Emma 92
- 5.