



NEWSLETTER

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Seasonal reminders:

- Vaccinate spring calves with 7-in-1 vaccine from 6 weeks of age, followed by a booster 4 to 6 weeks later.



- Bulls should have their fertility assessed and be vaccinated against vibrio and pestivirus (BVDV) at least 2 weeks before you plan to use them.
- Autumn born calves may benefit from a fluke drench now. It is not usually necessary to treat spring calves until January.
- If you have used a bull at the end of the autumn joining watch out for the possibility of early spring calving cows and heifers getting pregnant. It is possible for cows to get pregnant within a week of calving.

Synchronisation Programs

There is no ‘one size fits all’ synchrony. We encourage you to talk to one of our vets about what program might best suit your needs.

Synchronisation programs can be confusing – there are many to choose from and lots of different terms used. We have been using Synch programs (and its variations) for many years with reasonable results

Schistosomus reflexus (“Inside out calf”)

Schistosomus reflexus is a foetal deformity that occurs in cattle as well as other species. The condition occurs early during embryogenesis, resulting in malformation of the foetus.

The defects occur due to a failure of a thickened area on the surface of the embryo to curve inwardly and connect.

Usually this would form the coelomic cavity (abdominal cavity). Clinically, this presents as inversion of the spinal column, and a pronounced ventral curvature, consequently the head is positioned near the sacrum/pelvis. There is exposure of the abdominal viscera, sometimes exposure of the thoracic viscera, limbs fused and a small/ malformed diaphragm.

Other potential abnormalities include scoliosis, lordosis, dorsal reflexion of the ribs, non-union of the pelvis and dorsal reflexion of the pelvic bones. Malformed organs are also possible, and on occasion the head and limbs may be enclosed in a complete sac.

It has been suggested that the condition of schistosomus reflexus may be inherited in an autosomal recessive manner, as there has been some familial associations. However, current data seems to be insufficient to provide a definitive genetic connection.

Australian data suggests, by proxy of calving difficulties due to schistosomus reflexus, that the foetal condition is uncommon (1.3% (90) of 6901 cases of calving difficulties). The condition appears to be more common in dairy cows but may occur in any breed.

If protracted labour occurs, it can result in an emphysematous foetus and a sick cow, consequently euthanasia or slaughter may be required due to the poor to guarded prognosis.



However, if the animal is clinically stable or can be stabilized, successful delivery of the deformed foetus may be achieved vaginally via mild traction and manipulation or foetotomy. Alternatively, a caesarean section can be performed.



Scouring Calves

Scours in calves are usually caused by bacteria (*E. coli* or *Salmonella spp.*), viruses (rotavirus or coronavirus), protozoan parasites (*Cryptosporidium spp.*) or a combination of these infectious agents.

When a calf is scouring it is at a high risk of dehydration and should be fed an increased volume of milk and/or supplemented with an electrolyte fluid. A rule-of-thumb is to double the maintenance fluid rate of a scouring calf to account for their ongoing fluid loss and initial level of dehydration. For example, a 40kg Holstein calf may normally drink 4L of whole milk each day but will require an additional 4L of electrolytes while scouring. An electrolyte fluid will help to balance the electrolytes (sodium, potassium, chloride), sodium bicarbonate and glucose that the calf is losing via its diarrhoea.

Signs of dehydration include a prolonged neck skin tent time, and, in severe cases, the eyes will appear sunken in the skull with a visible gap between the globe of the eye and eye socket.

If the calf will suckle, its fluid requirements can be met with increased bottle feeding. If the calf is not suckling, it may require an oesophageal tube to be passed to administer fluids. Be cautious that the calf is not taking fluid into the lungs and that it is not being overfed as premature and small calves should not be fed more than 1L at a time.

Daily fluid requirements should be met via multiple small feeds, with most unwell calves needing to be supplementally fed a minimum of three times a day. Severely ill calves that are weak and have difficulty swallowing may require intravenous fluids that can be administered by a veterinarian.

An unwell calf is also likely to be hypothermic (cold) and may benefit from

wearing a jumper and staying in a sheltered pen to keep warm.

If your calf continues to deteriorate in condition, becomes more dehydrated or the scours do not improve after several days, it is best to get the calf examined by one of our veterinarians.

Our vets can help you develop a calf scours treatment protocol specific to your farm.

How to Diagnose the Cause of Scours (Diarrhoea) in Calves

When looking at faeces, it is not possible to diagnose the exact cause of scours in calves.

There are several causes of scouring in calves, which include infections and non-infectious causes.

Infectious causes include:

- Rotavirus
- Coronavirus
- Escherichia coli (*E. coli*)
- Cryptosporidium parvum (Crypto)
- Clostridium perfringens
- Giardia
- Salmonella
- Non-infectious scour is usually associated with a change in nutrition (for example a change from whole milk to a calf milk replacer or an increase in volume being fed).

There is a calf side test that involves sampling the faeces and running a test that takes approximately 15 minutes to provide a result. This test can diagnose the following common calf scour pathogens:

- Rotavirus
- Coronavirus
- Escherichia coli (*E. coli*)
- Cryptosporidium parvum (Crypto)
- Clostridium perfringens
- +/- Giardia



The calf side test is not capable of diagnosis Salmonella. A faecal culture needs to be carried out and this is carried out in a laboratory setting.

Note: Salmonella is a common cause of scours in calves and often the scour contains blood.



Hernias in Dairy Calves

Hernias in calves—especially umbilical hernias—are something we occasionally see in young dairy stock. We commonly detect them at disbudding.

Hernias occur when a portion of the abdominal content pushes through a weak spot in the abdominal wall, often near the navel.

What to look for:

- A soft, round swelling at the navel
- Size may vary—some are small and go unnoticed, others can be large and problematic
- In more serious cases, the calf may show signs of pain, swelling that doesn't reduce, or reduced appetite

Common causes:

- Genetic predisposition
- Improper handling of the umbilical cord at birth
- Infection of the navel leading to tissue weakness

When to act:

- Small, non-painful hernias may self-correct or remain stable
- Large or painful hernias should be examined—some may need surgical repair
- If infection is present (hot, painful, discharge), immediate treatment is needed

Prevention tips:

- Maintain clean calving areas to reduce infection risk
- Ensure proper navel dipping at birth (iodine or chlorhexidine)
- Avoid pulling calves unless necessary and done correctly

If you spot a suspicious swelling or are unsure, it is best to get it examined by one of our vets.

Thank you to Malcolm W, University of Sydney final year veterinary student, for his contribution to this month's newsletter.



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