

NEWSLETTER

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Seasonal reminders:

- Cows should calve in a clean environment, so preparation of this area should start soon. Also make sure calf sheds are clean before the first batch arrives.
- Check dry cows each week for mastitis. Walk around them and look for swollen quarters. Any quarters that have mastitis should be treated as you would treat an infected quarter during lactation. Do **not** touch the other quarters unless they look suspicious.



- Spray paint the leg that is lame if we are coming out to treat lame cows. Sometimes the cow that is very obviously lame walking along the track can mask that lameness once she is stirred up and on concrete.

Use Metricure early

We know that treating cows with a Metricure when they have an infection in the uterus helps their fertility. If cows, with a discharge of pus from the cervix, are treated within 4 weeks of calving then their first-round conception rate is **48%** compared with **22%** in untreated cows.

Which cows to check?

- **Cows with retained foetal membranes**
- **Stillbirth or a calf that dies within 24 hours of birth**
- **Twins**
- **Milk fever**
- **Discharge from vulva seen 7 days or more from calving**
- **Assisted calving**

It is important to be hygienic when checking to see if cows have a discharge from the cervix. If you use a gloved hand, make sure that you use disinfectant, and that the vulva is cleaned properly.

The best way to check to see if a cow has a pus discharge is to use a metricheck device. This is a thin metal tube that has a rubber cup like an inside out squash ball.

Ideally, you should aim to treat dirty cows within **2 weeks** of calving to get the maximum benefit.

In the large trial at Maffra, they found that when cows were treated with Metricure 6 weeks or more after calving that their fertility was worse than when they were left untreated.

Our thinking is that when cows have been calved this long the cervix is shut tight and all the extra fiddling around passing the pipette does more harm than the good of the antibiotic.

Heifers with udder oedema (flag)

Heifers with flag (fluid swelling in the udder and under the belly) are a nuisance as they are prone to mastitis and are difficult to milk out. The ligaments that support the udder may stretch permanently. Several different factors cause udder oedema: -

- Salt retention by the heifer
- Pressure on the veins returning blood from the mammary gland by the calf
- Low protein levels in the blood as antibodies move from the heifer's blood to colostrum
- Heavy grain feeding (especially in heifers)
- Excess salt intake (sodium and potassium)
- Insufficient intake of calcium

Heifers with flag that have already calved can be treated with **Fruzemide**, which is a diuretic that rapidly reduces the fluid swelling. A dose of oxytocin (Letdown) after calving will help as well.

Pre-calving treatment options are: -

- Induce calving with a short-acting cortisone injection
- Milk affected heifers before calving
- Apply teat spray to heifers before calving. The glycerine will help with teat health and the disinfectant will help reduce mastitis. This is only practical if heifers are getting lead feed in the dairy.
- If your heifers are quiet and willing to stand at the lead feed trough, they can be teat sprayed with a long nozzle/wand on a garden sprayer.
- Add a calcium supplement such as limestone to the ration.

Heifers take longer to calve and lie down for longer periods during calving, so their udders are more likely to get contaminated with mud and manure. Older cows will boss heifers around and force them to calve in the worst area. For this reason, heifers should be calved in a separate paddock away from older cows if it is possible.

If you are thinking of inducing heifers to calve, we find that a short-acting cortisone, such as **Dexapent**, is a gentler option than **PG**. Heifers induced with **PG** are more likely to calve quickly but sometimes the cervix and birth canal do not dilate properly increasing the chance of tearing. Heifers induced with **Dexapent** are less likely to retain their

afterbirth compared with heifers induced by **PG**.

Antibiotic Residues in Milk

When antibiotics are detected in milk that is delivered to the factory, it is worth discussing this issue with one of our veterinarians. Sometimes the cause is obvious – someone has made an error and/or normal procedures were not followed.

For the last several years when bobby calves have tested positive for antibiotics it has been mandatory for the vet that has dispensed the antibiotic to thoroughly investigate the case. We have been able to determine what went wrong and help people put in place protocols that minimise the chance of an antibiotic residue occurring again. This system has been very successful in reducing the number of antibiotic residues in bobby calves.

It is not mandatory for the dispensing vet to be involved in antibiotic violations involving milk. Processors tell us that they encourage suppliers to contact their vet, but it seems that this only happens some of the time.

A common cause of antibiotic residues in milk is when cows calve earlier than expected. This can be due to natural variation, twins, misleading preg test results or poor joining records.

When cows calve earlier than expected, it is important to keep cows out of the vat for the prescribed time. For Cevravin DC the minimum dry period is 49 days and then cows must be kept out of the vat for 4 days after they calve. This means that the total period that needs to elapse after Cevravin DC is used is $49 + 4 = 53$ days. For Juraclox DC the minimum dry period is 35 days so the total period out of the vat is $35 + 4 = 39$ days.

Because Cevravin DC has a longer minimum dry period it is essential that you have accurate calving dates. The best way to get accurate calving dates is to preg test cows with an ultrasound that are less than 16 weeks pregnant.

There have been occasions when there has been no obvious reason for the antibiotic violation. We are particularly keen to investigate these cases.

Mastitis and “failure to cure”

Mastitis cases that do not cure with treatment are very frustrating but common. Not all cases are cured with treatment. The reported cure rates for the common mastitis pathogens are:

- *Strep uberis* = 82-91%
- *Staph aureus* = 20-60%
- *Strep dysgalactiae* = 90-98%
- *Strep agalactiae* = nearly 100%
- *E. coli* = High rate of spontaneous cure (generally not treated if cow is not sick)

There are numerous reasons for failure to cure. Using the wrong antibiotic is usually the least likely reason but we do occasionally see mastitis bugs which are resistant to some of the common antibiotics.

Older cows, cows in late lactation, cows with multiple infected quarters and cows with chronic long-term high cell counts are all harder to cure. Other factors that reduce the chance of a cure are not milking cows out properly, or if teats are contaminated when treatment is introduced.

The use of drugs that are out of date or that have not been stored correctly or where label directions are not followed may also lead to reduced cure rates.

As there are many reasons for treatment failure, we should try and maximise the likelihood of cure at first treatment. This can be done by knowing what mastitis pathogen we are dealing with, selecting appropriate cows to treat and using appropriate antibiotic and supportive treatments.