

# NEWSLETTER

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**Seasonal reminders:**

- Early removal of eye cancers is much easier and more likely to be successful. If you are not sure if an eye problem is cancer or not get the eye checked promptly.
- Bulls should be fertility tested and vaccinated annually against vibrio and pestivirus at least 2 weeks before you plan to use them. All newly purchased bulls should be ear notched and tested for BVD.



- Calves born to late calving cows get sicker more quickly when the weather is hot. Prompt treatment with electrolytes is essential as calves born in hot weather often do not get adequate colostrum. They also dehydrate a lot more quickly than calves born in cool weather.

**Botulism and mixer wagons**

Botulism is a neurological disease caused by bacteria that produce toxins that cause paralysis. The bacteria proliferate in warm enclosed environments such as animal carcasses and decaying vegetation in hay bales or silage stacks.

Cows get botulism when they eat material contaminated with the toxin. The toxin is absorbed from the gut into the bloodstream where it blocks the junction between the nerves and muscle rendering the animal paralysed.

Botulism affected animals show a range of signs ranging from being floppy, weak and wobbly with drooling and tongue paralysis through to down cows that are unable to rise and do not respond to treatment with calcium.

There is no effective treatment for botulism other than good nursing. It is often fatal.

In Australia we see cases of botulism in extensive situations where cattle chew on bones of dead animals often because they are deficient in phosphorus. Cattle in northern Australia are routinely vaccinated against botulism.

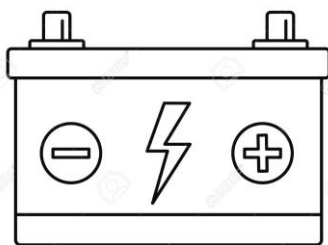
The other situation where we see botulism is in more intensive systems where cattle are given feed that has been contaminated with dead mice, rabbits or foxes or spoiled silage that has not reached a low enough pH.

The significant risk in our systems is for people that use a mixer wagon that will mix any botulism toxin throughout the feed. In instances where this has occurred the outcomes have been catastrophic.

Prevention of botulism relies on avoiding having dead animals in hay and silage and keeping feed quality high. This is not always possible, so it is worth thinking about vaccinating against botulism. The risk of cows

getting botulism is low but if feed is mixed in a mixer wagon the potential for a catastrophe is real.

Botulism vaccines have different claims for their effectiveness. Singvac claims to give three years of protection from a single dose and is relatively inexpensive. A reasonable strategy is to vaccinate every milker once and then vaccinate heifers as they enter the herd.



## Dispose of batteries carefully

A recent case of lead poisoning in heifers has highlighted the importance of disposing of batteries thoughtfully.

Two heifers out of a mob of forty-seven died showing neurological symptoms. The heifers were blind and staggering before dying.

In this case the batteries were exposed after a rubbish pile was burnt. It is possible that the batteries had been there for 10 years or more.

All heifers that were in that paddock will need to have their blood lead levels checked to make sure that they are fit for human consumption. One of the issues with lead poisoning is that levels of lead can stay high for years after exposure and these animals can never enter the food chain.

Our experience with lead poisoning is that for every animal that dies there are one or two with elevated levels of lead in their blood.

The important message is to be careful giving stock access to

paddocks that are rubbish tips or that have been rubbish tips in the past. As well all lead batteries should be recycled and not thrown out.

## Eye cancer in cows

Cancer eye in cattle is a squamous cell carcinoma and is like the more common types of skin cancer in humans.

We see three main types of eye cancer: -

- Cancer of the third eyelid
- Cancer on the eyeball
- Cancer of the top or bottom eyelid

### Cancer of the third eyelid

The third eyelid is a membrane that lies on the nose side of the eye and helps clean the eyeball of dust and other foreign matter.

Third eyelids are either pink or black depending on the breed of cattle. Only pink third eyelids are prone to developing cancer. We very rarely see third eyelid cancers in Jerseys but commonly see it in Holsteins.

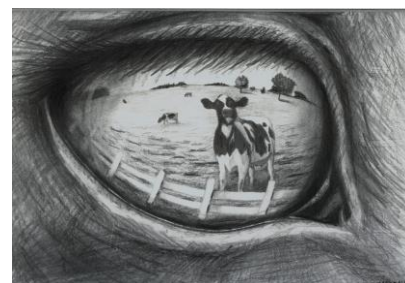
While third eyelid cancers are common, they are easy to remove so long as they are treated promptly. If left too long the cancer can become quite extensive and is harder to treat, in some cases it cannot be treated at all.

Abattoir regulations against eye cancers are strict and so in advanced disease the animal may not be allowed through an abattoir, meaning she will need to be sent to the knackery, losing the carcass value.

It is likely that eye cancers grow more quickly in the later stages of pregnancy because the cow's immune system is suppressed, so this is another risk period where you should check eyes frequently.

### Cancer on the eyeball

Cancer on the eyeball is less common than third eyelid cancer. These cancers usually start on the margin of the white part and dark part of the eyeball and look a little bit like a cauliflower.



### Eye cancer detection

Eye cancers of the left eye are worse on some farms and on other farms the right eye seems to be more severely affected.

Our theory is that on rotary dairies that spin anti-clockwise the right eye is seen twice a day by the cups-on person. The left eye is not seen as often, and so eye cancers have progressed further before they are noticed.

The opposite is true for platforms that spin clockwise.

Cows in herringbone dairies may have a similar problem if they only go in one side and that is the side where their eye cancer develops.

So, what is the answer? It may be worthwhile to designate one milking a month to eye cancer detection of the eye that is normally hidden. On anti-clockwise platforms, for example somebody positions him or herself in a position to observe left eyes. A good place to do this is the exit race.