

# NEWS

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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, mouldy feed, 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 (particularly flood affected).

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.

A reasonable vaccination strategy is to vaccinate every milker once and then vaccinate heifers as they enter the herd.

## Mouldy hay/silage

There is a lot of water damaged hay and silage around now which has become mouldy. To date we have not seen any problems that we think have been caused by mouldy feed. The main problems associated with mouldy feed are:

### Abortion

In outbreaks of fungal abortion, it is usually reported that pregnant cows have eaten large amounts of mouldy hay. The incubation period is long as the mould slowly grows through the placenta until the foetus is killed. Most cows that abort with fungal infections do so in the last third of pregnancy.

A significant number of cows that abort (about 25%) go on to develop a fungal pneumonia that is untreatable and usually fatal.

### Liver damage

The liver can be damaged by eating certain moulds that contain toxins. The first sign is usually photosensitization (Photo) that is secondary to liver damage.

Some cows may have their brain affected by liver damage and act in strange ways.

### Jejunal Haemorrhagic Disease (JHD)

We have seen odd cases of bloody gut (JHD) where a clot of blood blocks the intestine. Most affected cows show no previous signs of being sick and are found dead. If the cow lives long enough to show signs of the illness, she may show mild signs of colic (treading and kicking at the abdomen, teeth grinding and grunting), have pale mucous membranes, appear depressed, have sunken eyes, and have a rapid heart rate. Faeces may vary from little passes to diarrhoea to having clots of blood.

The exact cause of the condition is unknown. However, it is thought to be multifactorial and is associated with a bacterial overgrowth of *Clostridium perfringens* Type A within the small intestinal tract. This condition has been associated with mouldy silage.

It is difficult to diagnosis in the live Animal. A definitive diagnosis is generally made at post-mortem.

Treatment consists of supportive measures such as IV fluids, calcium and pain-relief. Surgery may be attempted to remove the clotted blood from the intestinal tract.

The prognosis is very poor, and majority of the affected cows die.

### To feed or not to feed

It is easy to say do not feed any mouldy hay or silage at all, but this may not be practical. It is worthwhile discarding the worst affected mouldy feeds as these conditions are more likely to occur if you feed large amounts of mould. It would also be recommended to discuss with your nutritionist, what toxin binding additives may be included in your herds ration.

## Other flood related cattle health issues

There are several other cattle disease and health issues that can be seen post flooding events. We have provided some additional information on the clinic's website, under the news page, we have a section on Cattle Health Concerns Post Flooding Events, which you can visit at <http://www.rochyvet.com.au/wp/news/>

## Eye cancer in cows

Cancer eye in cattle is a squamous cell carcinoma. 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.

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.

### 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.