

# NEWS

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**Seasonal reminders:**

- Do not let cattle graze country with significant amounts of heliotrope. Heliotrope damages the liver and cattle are affected months and even years later.
- Calves born this spring should be treated for liver fluke at about this time. We recommend drenching calves with Fasinex or Flukare C oral drench. The injectable treatments for fluke such as Ivomec Plus or Virbamec Plus are suitable for adult cattle. They should not be used on calves they do not treat immature fluke.
- Review your farms BVDV management plan and consider performing bulk milk antibody testing to assess your milking herds status.



**Pinkeye (Infectious Bovine Keratoconjunctivitis (IBK))**



On several farms late last year, we conducted eye swabs on calves with IBK lesions as the farms had experienced a

high rate of IBK despite using the Piliguard vaccine. This vaccine only protects against *Moraxella bovis*. The lab cultured both stains, *Moraxella bovis* and *Moraxella bovoculi* on these farms. Which may explain why the Piliguard vaccine appeared not to work.

The common vaccine used in Australia is Piliguard. It is a 2ml injection given 3-6 weeks prior to the pinkeye season and may be used in calves from 2 weeks of age. The Piliguard vaccine contains formalin inactivated cultures of three *Moraxella bovis* strains (not *Moraxella bovoculi*). A vaccine study shows that the vaccine provides protection against 64% of Australian field *Moraxella bovis* isolates, which was identified on 77% of farms investigated for pinkeye outbreaks.

Occasionally, some farms experience reduced efficacy of the commercial vaccine. In investigating further, we have found that this often traces back to an outbreak of bacteria not covered in this formulation (particularly *Moraxella bovoculi*). In these cases, we recommend an autogenous vaccine, which is made from the unique strains cultured on individual farms. One study looking into this new vaccine strategy suggested efficacy may be slightly better with these farm-specific vaccines.

**Overview of IBK:**

IBK is one of the most common contagious ocular diseases seen in cattle. It is of importance due to the economic impact it can have on herds (in terms of production losses and cost associated with treating affected

cattle) and the impact on animal welfare.  
 IBK is a multifactorial disease and is associated with a range of animal factors (such as breed, age, immune status, ocular trauma) and environmental factors (such as UV light, dust, flies).

Clinical signs of IBK include the following:

- Increased tear production, closing eyelids and photophobia.
- Cornea becomes cloudy and a white spot can appear in the centre.
- Corneal ulceration and the cloudiness of the whole cornea.
- Granulation (pink tissue) may develop with a purulent (white pus-like) core.
- Severe cases, cattle will develop a small white scar and other are left permanently blind.
- 2% of untreated cases may lead to eye rupture.

Treatment of the individual consists of the following:

- For mild early cases (corneal ulcers  $\leq 0.5$  cm) treat with topical Orbenin® eye ointment (OEE) - ¼ to ½ a tube applied, 72 hrs apart. **Both eyes should be treated and the cream in the unaffected eye first. Pinkeye patches** over the affected eye(s) can prevent further irritation due to flies, dust and UV light and reduce the transmission between calves.



- For more severe cases (corneal ulcers  $> 0.5$  cm), calves require an anti-inflammatory (such as meloxicam), long-acting antibiotic and topical OEE. Pinkeye patches over the affected eye(s) or stitching the eyelids closed.
- **All** treated animals should be segregated to prevent further transmission in the herd.

- Treatment failure may reflect delayed/inappropriate treatment or resistance.

Prevention is based around:

i) Vaccination:

As discussed above.

ii) Fly control:

Fly control is generally carried out via chemical backline treatment. Other measure of fly control consists of fly traps, predatory wasps, and beetles.

iii) Minimising risk factors:

If certain risk factors can be identified, strategies can be implemented to reduce the risk of IBK.

Herd IBK outbreaks:

In herd outbreak situations where  $> 15-20\%$  of the herd affected, it is often required to blanket treat all animals with a long-acting antibiotic. This will assist in treating those affected, reduce the spread between calves and eliminate infection of carrier animals.

- Put cows on the yards under sprinklers during the hottest part of the day.
- Adjust milking times to avoid the warmer period of the day- earlier morning and later evening milkings.

## Mastitis Culturing at the Practice

In recent times the practice has been offering in-house mastitis culturing and we can provide most results to the farmers in approximately 24 hours. Recent research has shown that by delaying treatment of cows with mild to moderate mastitis (those cows that are not obviously unwell from the mastitis- these cows should be treated immediately), does not affect the outcome for that cow.

Milk samples from mastitic cows need to be collected in a sterile manner and refrigerated or frozen if there is a delay between sampling the cow and dropping it off at the practice. It should be noted that between 10-40% of samples will have no growth.

No growth results maybe due to no bacteria present, not enough bacteria present to allow growth on culture plates (need 100cfu/ml), or antibiotics present in the milk sample. Mastitis cultures carried out at the practice;

- Will allow results to be provided in a timely manner.
- Treatment can be based on the mastitis pathogen identified.
- Reduce the use of antibiotics for cases that do not require them.

Common treatment advise is provide in the table below:

Mastitis pathogen	Advise
No growth	No treatment +/- Anti-inflammatory
<i>Strep uberis</i>	Antibiotic and an anti-inflammatory Eg. Cloxacillin and Metacam
<i>Staph aureus</i>	Antibiotic and an anti-inflammatory Eg. Cloxacillin and Metacam
E. coli	No treatment
<i>Strep dysgalactiae</i>	Antibiotic and an anti-inflammatory Eg. Cloxacillin and Metacam
<i>Strep agalactiae</i>	Antibiotic and an anti-inflammatory Eg. Penethamate hydroiodide and Metacam

We are unable to provide sensitivities to common antibiotics used to treat mastitis. If you require antibiotic sensitivities, we can send the sample to an external laboratory.

## Digital Newsletter

We are looking to distribute our newsletter via email instead of mail in the near future. Some of you have been receiving the newsletter via email already. If you would like to continue to get our newsletter, please contact the practice and we can add your email address to the email list.

The newsletters are also available on the practice's website [www.rochyvet.com.au](http://www.rochyvet.com.au).