

# Pinkeye

Pinkeye or Infectious *Bovine Keratoconjunctivitis* (IBK) is caused primarily by a bacteria, *Moraxella bovis*, although other pathogens have also been implicated. For clinical signs to develop, the bacteria needs to bind to the surface of the eye (the cornea) before releasing a cell toxin which causes “punch-like” holes to form in the corneal surface.



There are multiple risk factors which can lead to “outbreaks” on some farms. Any irritant causing damage to the corneal surface creates a favourable environment for *Moraxella bovis*. Ultra-violet (UV) radiation, dust, pollen and seeds are significant risk factors and predominate in summer, explaining increased cases observed during these months. Nuisance flies also peak in summer, promoting the spread of infection between animals. White-faced cattle or those with protruding unpigmented third eyelids are more susceptible. Previously infected animals can become ‘carriers’, shedding the bacteria in their tears and allowing the continuing spread of infection.

## CONSEQUENCES OF PINKEYE

Pinkeye is more common in young stock, affecting up to 80% of some herds. The disease is very painful and can cause blindness which is temporary in most cases. Severely affected animals may have permanent loss of sight. If untreated, Pinkeye is a significant welfare concern. Decreased feed intake, poor growth rates, reduced production in lactating cows and potentially reduced value at market lead to economic losses.

## SIGNS

Excessive tear production from the affected eye, leading to wetting of the face may be the only initial sign. The eyelids will be partially or fully closed; the animal may blink excessively and/or seek shade to avoid sunlight. As the disease progresses, the surface of the eye becomes cloudy in the centre, often followed by formation of yellow pus surrounded by a characteristic pink ring. Ulceration of the cornea is common and in severe cases the eyeball may protrude and change shape.

## TREATMENT

Early and prompt treatment is essential for a favourable outcome. Commonly, topical antibiotics are required to enable a prompt recovery with minimal pain. Sometimes an antibiotic is injected into the conjunctiva of the eye by a veterinarian and a course of injectable antibiotics may be prescribed. Eyepatches covering the affected eye are useful to avoid sunlight during recovery. In extreme non-responsive cases, surgery may be required to remove the damaged eyeball.

## PREVENTION AND CONTROL

Fly control is essential to reduce the spread of infection and pour-on products registered for use in dairy animals can be used. Always read the label carefully and check for any withholding periods. Avoidance of paddocks with long grass or near bushland and excessive yarding in dry, dusty conditions will help decrease the risk of Pinkeye. Early identification, prompt treatment and segregation of affected animals will help limit the spread of infection within the herd.

There is one registered vaccine for the prevention of Pinkeye in Australia (Piliguard, Coopers®). This is a single dose vaccine and needs to be given 3-6 weeks prior to the onset of the Pinkeye ‘season’. It should be used as part of an integrated management plan for the prevention and control of Pinkeye.