

# FACT SHEET

## CALF SCOURS



### WHAT IS CALF SCOURS?

Calf scours, or neonatal diarrhoea, causes significant losses in calves up to six weeks of age.

Common pathogens causing calf scours include:

- ▶ viruses *Rotavirus*, *Coronavirus*
- ▶ bacteria *E.coli*, *Salmonella*
- ▶ protozoa *Cryptosporidia*, *Coccidia*.

The impact of the disease can be greatly reduced by management, with or without vaccines.

In beef herds it is difficult to control once an outbreak occurs so reducing the risk of an outbreak is important.

### CAN CATTLE DEVELOP IMMUNITY?

A healthy calf that has adequate high quality colostrum can tolerate some exposure to the scour pathogens and become resistant.

### HOW IS IT SPREAD?

The disease is caused by an interaction between the susceptible host and the environment. Cows shed the scour causing pathogens at low amounts continually. This can cause disease in susceptible young calves who then amplify the pathogen, contaminating the environment and causing an outbreak.

Affected calves are the biggest source of contamination putting other calves at risk.

Disease spread is worse in cold wet conditions and high stocking rates, and anything that affects colostrum quality or intake such as calving difficulties, young heifers or animals in poor condition, can lead to an increase in disease.

### WHAT ARE THE SIGNS?

Some scouring in calves is considered normal in most herds. However, signs of the disease vary from sticky white or yellow scours stuck around the tail with the calf remaining bright and continuing to suckle, to severe watery scours with depressed calves that won't drink.

The signs depend on the pathogen and the health, age and immunity of the calf.

The disease is worse in weak calves or calves with low immunity from poor quality or inadequate colostrum received in the first 12 to 24 hours.

### REDUCING THE RISK

Management strategies are aimed at maximising the resistance of calves and minimising exposure to the scour bugs.

- ▶ Maximise the uptake and quality of colostrum. Colostrum quality is lowest in heifers and when females are in poor condition or on a low plane of nutrition. Cows should be a minimum of condition score 2.5 for spring and 3.5 for autumn.

- ▶ Dystocia results in calves with weak sucking ability. As a rule, dystocia rates should be less than five per cent in heifers.
- ▶ Minimise exposure to pathogens by reducing the build-up of pathogens in the calving paddock. Aim to have a compact calving period, six weeks for heifers and a maximum of nine weeks for cows. The longer the joining period the greater opportunity for manure and pathogens to build up in the calving paddock.
- ▶ Plan in advance to avoid using the same calving paddock year-in-year out, especially for heifers. Move calving cows every three weeks into a fresh paddock or drift off newly calved cows into a separate group.
- ▶ Avoid using the same spot for supplementary feeding to avoid manure build-up.
- ▶ Calves with clinical scours are a source of infection for other calves, so remove scouring calves and their mothers to a hospital paddock.

## TREATING SCOURING CALVES

An outbreak of calf scours can easily cost \$50 per cow so it is worth investigating and diagnosing the problem correctly. A vet can test to find out the pathogens affecting the calves which will guide treatment and future prevention plans.

Treatment of affected calves is aimed at keeping them hydrated and potentially treating the underlying cause. Remember that antibiotics do not work on viruses or *Cryptosporidia*.

It is always a good idea to remove the affected calf from the calving paddock. If the calf is dehydrated, aggressive treatment with oral rehydration fluids at up to 1L/10kg is recommended three times per day. A tube feeder is the easiest way to do this.

The calf can stay with its mother if it is able to suckle and follow her. If the calf is unable to rise and is cold then it needs urgent rehydration with IV fluids from a vet.

## VACCINATION

Vaccination can help build immunity to specific pathogens in the cow. However, the vaccine needs to provide coverage for the specific pathogens causing the problem on your farm.

## TAKE HOME MESSAGES

- ▶ Scours is an important disease causing economic loss through calf deaths and reduced production.
- ▶ Prevention is aimed at reducing contamination and having healthy calves.
- ▶ Get a diagnosis from your vet to identify the specific pathogens on your farm.
- ▶ Vaccination in combination with management changes may help reduce the impact.

There are a number of vaccines that help prevent the main viral infection and some of the bacterial causes. There are also vaccines targeting *Salmonella* specifically. For most products an initial injection 10-12 weeks, and a booster four-six weeks, before calving is required. This is followed by an annual booster four-six weeks prior to calving if necessary.

## HUMAN HEALTH

Some causes of calf scours such as *Salmonella* can cause serious disease in people. Good hygiene after treating or handling sick animals is important.

For more information contact Stock Sense on 1300 020 163 or [stocksense@vff.org.au](mailto:stocksense@vff.org.au).

## FURTHER LINKS

**Calf scours, Meat & Livestock Australia**

[www.mla.com.au/research-and-development/animal-health-welfare-and-biosecurity/diseases/infectious/calf-scours/](http://www.mla.com.au/research-and-development/animal-health-welfare-and-biosecurity/diseases/infectious/calf-scours/)

**Nutritional scours in milk-fed calves, Agriculture Victoria**

<http://agriculture.vic.gov.au/agriculture/dairy/dairy-cattle-health-and-welfare/nutritional-scours-in-milk-fed-calves/>

**Treating calf scours, NSW DPI**

[www.dpi.nsw.gov.au/\\_\\_\\_data/assets/pdf\\_file/0015/50208/treating\\_calf\\_scours\\_-\\_primefact\\_135-final.pdf](http://www.dpi.nsw.gov.au/___data/assets/pdf_file/0015/50208/treating_calf_scours_-_primefact_135-final.pdf)

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