Calf Scours

Calf scour outbreaks are a common and frustrating occurrence on New Zealand farms and can recur year after year if appropriate preventative measures aren't taken.

As there are several different bugs that can cause scours in calves, a tailored approach depending on the cause, along with good hygiene, feeding and management techniques, can significantly reduce the occurrence of calf scours on New Zealand farms.

Calf scour investigations should start with assessment of calf condition and health status, environment that calves are kept in, hygiene procedures, and faecal analysis to determine the cause. Other important factors are management of calves straight after calving, colostrum intake and vaccinations.

It can be surprising what simple and cheap measures can be taken to significantly improve health and welfare of calves and reduce the occurrence of scour outbreaks. In some cases this may not be enough and input from your experienced farm vets, accurate diagnostics and team work are essential to improving the on-farm situation.

CONTROL & PREVENTION

Control and prevention of calf scour outbreaks starts with the calves' environment. Calve cows in clean non-muddy paddocks, and transport calves in clean non-crowded trailers to clean and dry, well ventilated but non-draughty calf sheds.

Calves require at least two litres of first-milking colostrum within the first six hours of birth, with a further two litres within 12 hours. This allows for optimal absorption of antibodies and energy and greatly improves calves' immunity to diseases like Cryptospirosis, Salmonellosis or Rotavirus scours.

After six hours the calf's ability to absorb antibodies is significantly reduced, so if early suckle reflexes are poor, calves should be stomach tubed with colostrum. Also, colostrum from the first milking contains more than twice the amount of antibodies compared to subsequent milkings, and should be kept separate for feeding newborn and young calves.

Ideally feed from individual or compartment feeders, so individual intake can be monitored and slow drinkers can get enough milk.

Ensure calf sheds are adequately prepared prior to calf arrival. Use appropriate virucidal sprays and change bedding as needed. Calves should be allocated a pen when they first arrive at the calf shed and stay in this pen the entire indoor time. This way calves are grouped according to their age, which can reduce disease spread from older to younger calves and vice versa. Consider a rodent control system and keep birds away from calf feeders as these can pass bacteria like Campylobacter on to calves.

Carefully observe calves each day and isolate and treat sick calves straight away. Taking faecal samples from scouring calves will help determine the cause and allow for appropriate treatment – talk to your vet.

This calf is recumbent, collapsed and has faecal staining around the tail base and back legs indicating a scour problem. It has likely not been feeding properly and has become dehydrated and cold. Immediate medical intervention is vital for survival of this calf.

KEY POINTS:

- Colostrum feeding is essential – at least two litres within six hours. Calves which fail to receive this are over four times more likely to suffer disease.
- Cleanliness and hygiene of calf pens and calf rearing utensils is crucial to reducing disease risk.
- Isolation, prompt examination and treatment of sick calves is essential to control outbreaks – samples should be tested after discussion with your vet.
- Attention to detail, consistency and routines help to enable healthy calf rearing – your vet can help set up Standard Operating Procedures (S.O.P.s).
- Team effort – talk to your vet and those responsible for calves. Address problems early, monitor outcomes and be prepared to change things as necessary.
- If a particular bug is found and is significant – discuss with your vet the best options for control/prevention.

XLVets Calf Scours

General Health and Health Planning

Example calf rearing S.O.P.:

- Ensure calf pens are sprayed, clean and ready to go.
- Give two litres colostrum to all new calves within six hours of birth. Use first-milking colostrum for all calves younger than four days.
- Initially feed two litres twice daily, with compartment feeders.
- Ensure milk fed is at correct temperature, fed cleanly and consistently.
- Do not feed mastitis or antibiotic milk.
- Ensure all calves have access to fresh water at all times.
- Ensure access to meal or concentrates from one week old.
- Offer straw or hay at all times from one day old, to encourage rumen development.
- Always feed healthy calves first and scouring (or sick) calves last.
- Clean all feeding utensils after each use.
- To clean pens, all bedding must be removed and allowed to dry, prior to the use of disinfectant.

Check calves for:

- Clean tails
- Bright eyes
- Shiny coats
- Playing and running around
- Suckling well

Example calf scour treatment S.O.P.:

- Isolate sick calves immediately and take faecal sample for vet (to determine cause of scour and assist with appropriate treatment).
- Assess calf's hydration status (sunken eyes, skin tenting) and whether still willing to suck (may need to tube feed if not suckling) – seek vet advice if concerned.
- Feed little and often, alternate electrolytes and milk. Dehydrated and scouring calves need at least 6-8 litres of electrolytes/milk per day. Leave at least two hours between electrolyte and milk feeds so it can be digested completely.
- Collapsed calves require imediate veterinary care and may need intravenous fluids and appropriate pain relief.
- If a particular bug is involved, other specific treatments may be needed - consult your vet.
- Vaccinations for Rotavirus, Coronavirus and E.coli can be used in soon to calve cows to increase colostral antibodies and prevent infection in seasons following an outbreak (strict timing with these so check with your vet pre-calving).
- Fix underlying management problems to prevent scours, rather than relying on treatment once they are sick.

Costs of calf scour:

- Reduced daily liveweight gain => older age at first service/first calving delayed profitability.
- Increased susceptibility to calf diseases => increased calf losses => increased replacement costs.
- Increased vet costs and purchase of drugs and electrolytes.
- Increased labour costs for isolation, materials and individual attention.
- Reduced team morale – unhappy calves = unhappy staff.

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For more information contact your local XLVets practice: