



# KEEP SCOURS OUT OF THE CALF PEN

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Scours is the general term for the condition and clinical symptoms associated with diarrhoea in calves. Scours is one of the main conditions contributing to pre-weaning mortality, mainly as a result of dehydration, electrolyte imbalance, acidosis, and intestinal damage. Scours in calves can occur throughout the pre-weaning rearing period, but is most likely to present within the first two to three weeks of a calf's life.

Reinfections are not uncommon, even after treatment. The effects of scours last for a long time and impact growth and development, leading to lower future production performance.

**The main intestinal infectious agents causing diarrhoea are microorganisms such as:**

- **Bacteria – *Escherichia coli*, *Salmonella*, and *Clostridium perfringens***
- **Viruses – coronavirus/rotavirus, bovine viral diarrhoea, and infectious bovine rhinotracheitis virus**
- **Protozoa – *Cryptosporidia* and *Coccidia***
- **Moulds, yeasts, and mycotoxins**

### MANAGING STRESS

The impact of stress must also be considered as it makes calves more susceptible to infection by the above infectious agents. Therefore, in reducing the risk of diarrhoea, the first points to consider are how to manage calf stress and ensure good hygiene in the rearing facilities. Managing the stress of the cow before calving is also important since this can predispose the calf to scours and thereby reduce the calf's chances of survival. Management of maternal stress includes taking measures to alleviate heat stress in dry cows in order to improve calf health and growth post-calving. A newborn calf is also exposed to many ambient stressors and because its immune and digestive systems are still developing the calf is highly susceptible to stress and infection. It is, therefore, paramount to ensure cow and calf comfort as well as keeping the calf rearing facilities clean.

### CLEANING

Hygiene at the rearing facilities must be managed to reduce the microbial load that the calves are exposed to, and thereby reduce the risk of infection. Hygiene management includes proper cleaning and disinfection of the milk replacer mixing and feeding apparatus. This includes cleaning

feed and water troughs, as well as pipelines, to ensure a fresh supply of feed and water. Bedding in pens should be replaced regularly, and pens thoroughly cleaned and disinfected before calves are re-introduced or replaced. The floor under the bedding should be disinfected after the bedding has been removed. As calves may tend to lick the sides of the pen, the entire pen, including the sides, should be cleaned to limit contamination.

Fly control around the calf pens is also very important in reducing cross-contamination. Another measure to control the spread of any disease is to quarantine sick calves away from healthy calves and avoid moving directly from the pens of sick animals to those of healthy ones. General biosecurity measures by handlers must be enforced around calf-rearing areas.



### NUTRITIONAL PRACTICES

Nutritional practices that benefit calf health are firstly ensuring a good intake of colostrum by the calf, within the first six hours after birth. Thereafter, when bottle feeding with either milk or milk replacer, make certain that the milk is wholesome and fresh. Avoid feeding milk from cows with mastitis, as this inoculates the calf's gut with pathogenic microorganisms.

Try to find ways to enhance the quality of the milk or replacer being fed. As scours occurs mostly in the first two weeks of a calf's life, any nutritional interventions to improve calf health should be made as part of feeding practices. Supplementing the milk

with a lysolecithin enhances fat emulsification to promote improved digestion of fat and absorption of nutrients. This leads to better nutrient utilisation for calf growth rather than promoting bacterial growth in the small intestine.

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## PROBIOTICS

The practice of probiotic supplementation helps to colonise the digestive system with more beneficial microbial colonies, which suppress pathogen proliferation. As a result, the digestive system of the calf is healthier and develops better. As the calf progresses to solid feed, any roughage or pellets provided should be fresh and free of mould and yeasts to promote good rumen development and growth.

To reduce the risk of scours and promote the health and growth of calves, careful attention should be given to mitigating stress, enforcing hygiene and biosecurity, and giving the calf good-quality feed. During the milk feeding phase, consider adding supplements that promote the intestinal health of calves. [mpo](#)

