



Key Points

1. The 3 P's - Planning, Preparation and Procedures provide the framework for successful calf rearing.
2. "Prevention is better than cure"
3. Preparation of the shed and maintaining hygiene all reduce risk.
4. Know your calves. How do they normally behave?
5. Act quickly as health issues caught early are easier to deal with.
6. Know what to look for and how to treat it.
7. When in doubt, be prepared to ask your vet.



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Calf Rearing Fact Sheet 2.2

Planning

- Have a plan in place for dealing with sick calves including recording of issues.
- Decide how you are going to identify calves that need to be watched e.g. use a range of neck bands with different colours—e.g. white for calf needs to be watched, blue for a calf on a course of antibiotics, yellow for a calf that needs electrolytes. Strips of cloth for tying up plants make ideal neck bands - get a range of colours from a hardware store.
- Set aside an area as a sick bay.
- Talk to your veterinarian about what you should be looking out for.

Calf arrival

- If your calves have travelled a long distance, feed 2 litres of electrolytes on arrival. If your calves are straight out of the paddock they should be fed colostrum for their first feed.
- On arrival at the shed, navels should be sprayed with iodine. Navels should be checked regularly for the first week. Calves with wet or swollen navels should be monitored. If the navel is hot, tender to touch or pus is present then the calf should be treated with antibiotics (penicillin). Early treatment will prevent later problems with things like joint ill.

Signs of a healthy calf

- Nose no discharge, moist and cool.
- Ears alert and responsive.
- Coat shiny, supple (if 'pinch and release' - the tent of skin should return to position fast. If it doesn't the calf needs fluids as it is dehydrated).
- Normal temperature is around 38 °C
- Respiration normal (56 breaths/min 4 days of age and drops to 50 breaths/min by 14 days of age).
- Calves should be alert, active and behaving normally.
- Any change in behaviour, appearance or feeding should be treated as an early sign that something is wrong.

Week 1-3

- During this early period it is essential to get the calf feeding well.
- Careful observation of calves morning and night and quick intervention when a problem arises is critical. Check for wet tails and make sure all calves are drinking well.
- Calves with issues should be recorded or the calf marked so that they can be re-checked at the next feed. Calf scours can kill rapidly and any sick calves should be isolated immediately to make treatment easier and reduce any cross contamination.

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- Calf scours at this age are commonly “nutritional” due to over feeding or a change of diet (e.g. milk to milk powder). Nutritional scours don’t last long but can affect a large number of calves at one time. Take the calves off milk and feed electrolytes for 24 hours. It is important that electrolytes are fed in large volumes as a scouring calf can dehydrate rapidly. If calves are active, electrolytes should be freely available for the calves to help themselves outside the feeding period.
- Infectious scours (caused by microbes) can be difficult to manage. Most commonly they are caused by Rotavirus, Salmonella, or Cryptosporidia. Large numbers of calves are progressively affected, and they require significant nursing care to prevent deaths. With infectious scours, milk and electrolytes are fed alternately. Electrolytes should be fed at least 4 hours after a milk feed. It is important to keep up the fluid intakes of calves to avoid dehydration.
- Isolate sick calves in an isolated sick bay and have separate equipment for healthy and sick calves. Rearers should make sure boots and clothes are clean and disinfected when moving between the two groups of calves. Do not return recovered calves to their pen mates as they will still be shedding the pathogens (bugs) that cause the scours and will remain infectious to other calves.
- Dehydration is the main cause of calf death. It occurs because too much water and electrolytes are lost from the body in the scour. Sick calves need large volumes of a high quality electrolyte replacer in the first 24 hours (6-10 litres depending on the degree of dehydration). This may require tubing with a calf feeder.
- Remove the top layer of dirty bedding as often as possible, or spread clean fresh sawdust on top daily. Spray all surfaces of all calf pens at least daily with disinfectant. Managing a calf scours outbreak is time consuming, stressful and can be heart-breaking. It requires professional support. Develop a working relationship with your veterinarian.
- If the calves are placed outside ensure they have access to good shelter and that they are all feeding well.

Week 3-5

- If calves are kept inside, build up of ammonia from the calf urine can cause pneumonia. Ensuring the shed is well ventilated and adding fresh layers of bedding regularly will reduce this risk. Signs include lethargy, rapid breathing, rise in body temperature and coughing. Early recognition and treatment with antibiotics will help prevent losses due to deaths and reduced growth rates.
- Watch out for any signs of arthritis, ear tag infections and abscesses particularly around the mouth.
- Castration after 6 months requires a local anaesthetic.

Dehorning

- Should either be done with a dehorning paste at 4 days of age or with gas disbudders at 4 to 6 weeks of age.
- A local anaesthetic is required for dehorning/ disbudding.



Vaccination

- This is to prevent clostridial diseases like blood poisoning and tetanus. Inject the calf with a 5 in 1 injection at 6 to 8 weeks of age followed by a booster 4 to 6 weeks later.

Colic

- Often the result of rapid drinking - the calf shows signs of distress within an hour of feeding - kicking its stomach and even falling over. Monitor teat flow rate. If caused by over-eating grain - give sodium bicarbonate dissolved in water.

Weaning

- Time of weaning off milk will depend on the feeding system used. Ensure calves that are being weaned are up to target weights and are fit and healthy. Keep feeding them meal/pellets and or good quality green leafy grass.