Calf Scours

Webinar written and presented by
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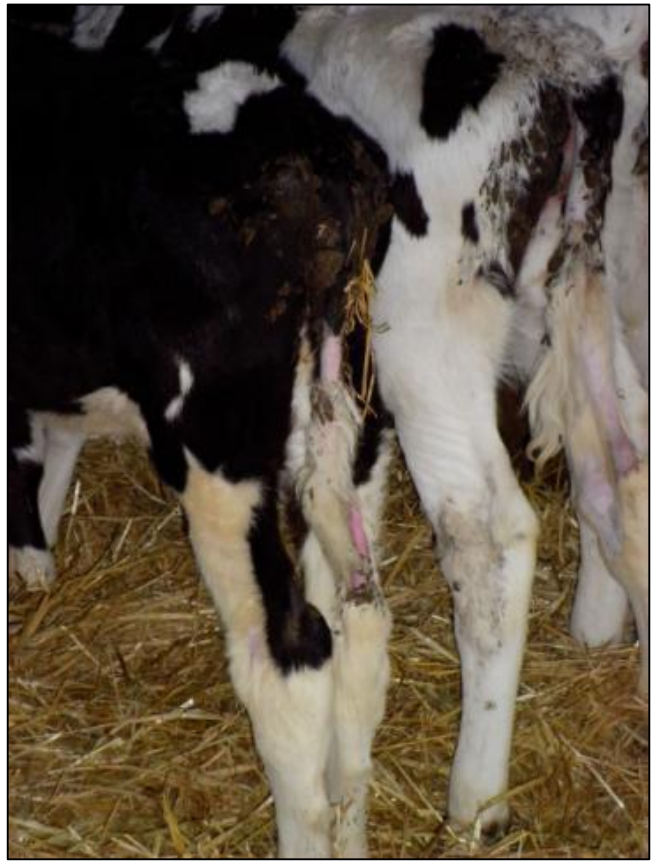
Overview

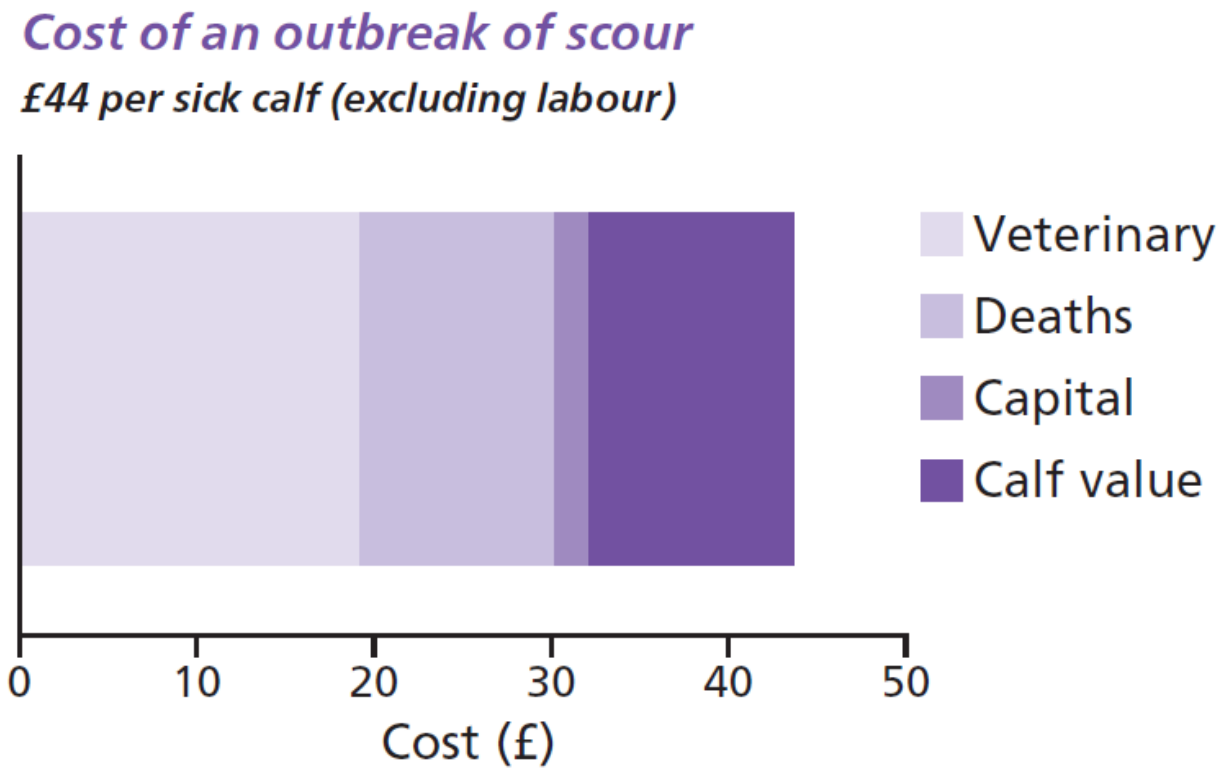
- Calf Scour
- The Impact
- The Causes
- Treatment
- Prevention
- Summary



Scours

- Calf scour (diarrhoea) is the most common disease in young calves, accounting for about 50% of all calf deaths.
- Easily recognised it is important that it is rapidly identified and that affected animals are treated appropriately to ensure survival.
- Calves affected by scour are most likely to die from dehydration as a result of the increased fluid loss.
- Damage to the gut results in reduced daily liveweight gains.

Economic impact



Scours – The Causes

- There are a number of different infectious causes of scour:
  - **Viruses:**
    - Rotavirus
    - Coronavirus
  - **Bacteria**
    - E.coli
    - Salmonella
  - **Protozoa**
    - Cryptosporidia
    - Coccidia
- Scours can also be nutritional in origin

Rotavirus and Coronavirus

- Common causes of diarrhoea in young dairy calves.
- Infection may be acquired in the calving pen then spread between young calves in the calf shed.
- Typical early signs include a reluctance to stand and drink, mild depression and salivation.
- The calf becomes dehydrated with sunken eyes and tight and inelastic skin; recumbency soon follows.
- Vaccines for rota and coronavirus are available for administration to cows prior to calving.
- This vaccination helps boost the immunity provided to the calf in the colostrum – therefore good colostrum feeding practices are essential.

E.coli

- The disease characteristically affects calves aged 1-3 days old when there is sudden onset of profuse diarrhoea.
- Causing rapid and severe dehydration. The calf quickly becomes recumbent.
- Accumulation of fluid in the abomasum and intestines gives the abdomen a bloated appearance.
- Disease is most commonly picked up from the calving pens so it is important to ensure good hygiene around calving.

Salmonella

- There is often high morbidity, and mortality may exceed 60%.
- The clinical signs depend on age:
  - Neonatal calves show signs of septicaemia and can rapidly die within 12hrs.
  - Commonly, affected calves are dull, anorexic, with an elevated rectal temperature, and have grey pasty faeces with fresh blood and mucus present.
  - Older calves may develop watery foul-smelling dysentery containing mucosal casts.
- Remember Salmonella is Zoonotic!

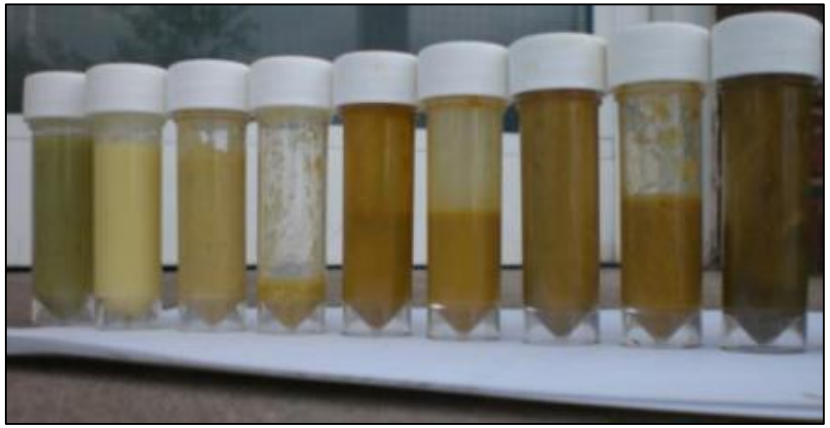
Cryptosporidiosis

- Cryptosporidiosis can rapidly build-up in group pens fed by automatic feeders where newborn calves are constantly added to the group.
- Diarrhoea is caused by the physical loss of absorptive area of the small intestine.
- There is only mild dehydration but the calf rapidly looses condition over 2-5 days and has a dull tucked-up appearance.
- Rehydration therapy is the mainstay of treatment and along with Halofuginone lactate.
- Cryptosporidiosis is a zoonotic disease.

Coccidiosis

- Suggested that all cattle kept under conventional conditions unavoidably experience infection with coccidia at some point in their lives.
- Estimations suggest that only 5% of infected animals show clinical signs of coccidiosis.
- The remaining 95% are subclinical.
- The economic impact of the clinical disease is widely acknowledged but the negative effect of subclinical coccidiosis on feed conversion and growth is often overlooked even though it occurs more frequently.

Diagnostics

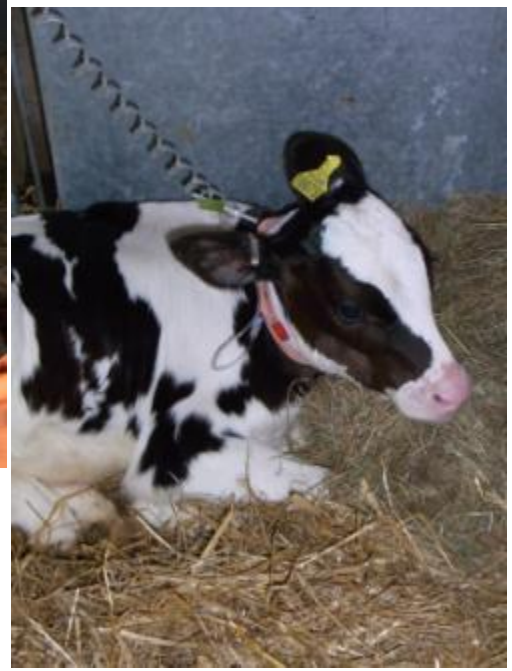


- Important to enable correct treatment to be administered.
- Impossible to tell the exact cause of scours based on clinical signs and the nature of the scour alone.
- Rapid diagnostics are available to allow on farm diagnosis of some causes of scour.

Scour Treatment

Fluid Therapy is the main component of treatment of scours.

- If the calf can still suckle this can be given orally.
- If the calf no longer has a suckle reflex it may be necessary for a vet to administer IV fluids.
- Electrolytes should given as additional feeds and calves should still be offered milk.
- Important to provide sufficient fluids to replace what has already been lost and overcome continued losses.



Scour Treatment

- Antibiotics are not always required and should only be used under veterinary prescription.
  - Antibiotics are not affective against viruses and protozoa.
  - Antibiotics are only effective against bacteria.
- Specific treatments will be required if cryptosporidia or coccidia are identified.
- Work with your veterinary surgeon to agree the most appropriate treatment and management strategies.
- Treatment will be most effective if administered early in the course of the disease.

Scour Prevention

- Ensure all calves receive sufficient good quality colostrum.
- Infectious scours are spread by exposure to faeces from affected animals so hygiene is the most important step in reducing the problem and avoiding the spread of disease.
  - Pens should be regularly cleaned out and disinfected (with a product containing a suitable active e.g. Hydrogen Peroxide), ideally between each group of animals.
  - All equipment used for the preparation and delivery of feed must be kept clean.
  - Isolate scouring animals.
- For certain pathogens vaccines and preventative medicines are available but these should be agreed with your vet.
- Nutritional scours can be avoided by ensuring the correct feed is being offered and it is being done so in a consistent manner.
  - Ensure a feeding plan is in place and it is being followed.
  - Ensure milk feeds are being prepared hygienically and in a consistent and accurate way.
  - Avoid unnecessary changes in diet.

Summary

- Scours is one of the most important cause of calf disease.
- There are a number of different causes of scour.
- Identifying the cause allows correct treatment and management.
- Main component of treatment is fluid therapy.
- Disease can be minimised through good hygiene practices.
- Vaccines can be used to promote immunity for certain pathogens.