

Cryptosporidiosis



Key facts

- Small, thick walled oocysts are resistant to chlorine, but can be disrupted by steam cleaning and 'active oxygen' disinfectants, e.g. 3% hydrogen peroxide.
- Due to the close association between human and animal hosts (humans feeding calves for example) there is a zoonotic risk.
- Small, sporulated oocysts excreted in faeces can last up to twelve months in the environment.
- Large numbers of oocysts are excreted – billions per calf per day – an infectious dose requires as few as ten oocysts.
- Isolate scouring calves for one week after treatment with halofuginone to reduce shedding.

- Cryptosporidiosis is a disease caused by *Cryptosporidium parvum* (*C. parvum*) infection which is spread by contact with reservoir hosts, i.e. cattle, sheep and goats or the environment in which these are housed.
- It is a Zoonotic disease which means it can be spread to humans, particularly from contact with neonatal farm animals.
- Most infections are sub-clinical, which means you may not see any signs of disease.
- Cryptosporidiosis is the most commonly diagnosed cause of calf diarrhoea.
- Older calves and adult cattle can shed *Cryptosporidium parvum* and act as reservoirs of infection to young calves. This has management implications: it is important not to mix different age group of calves.

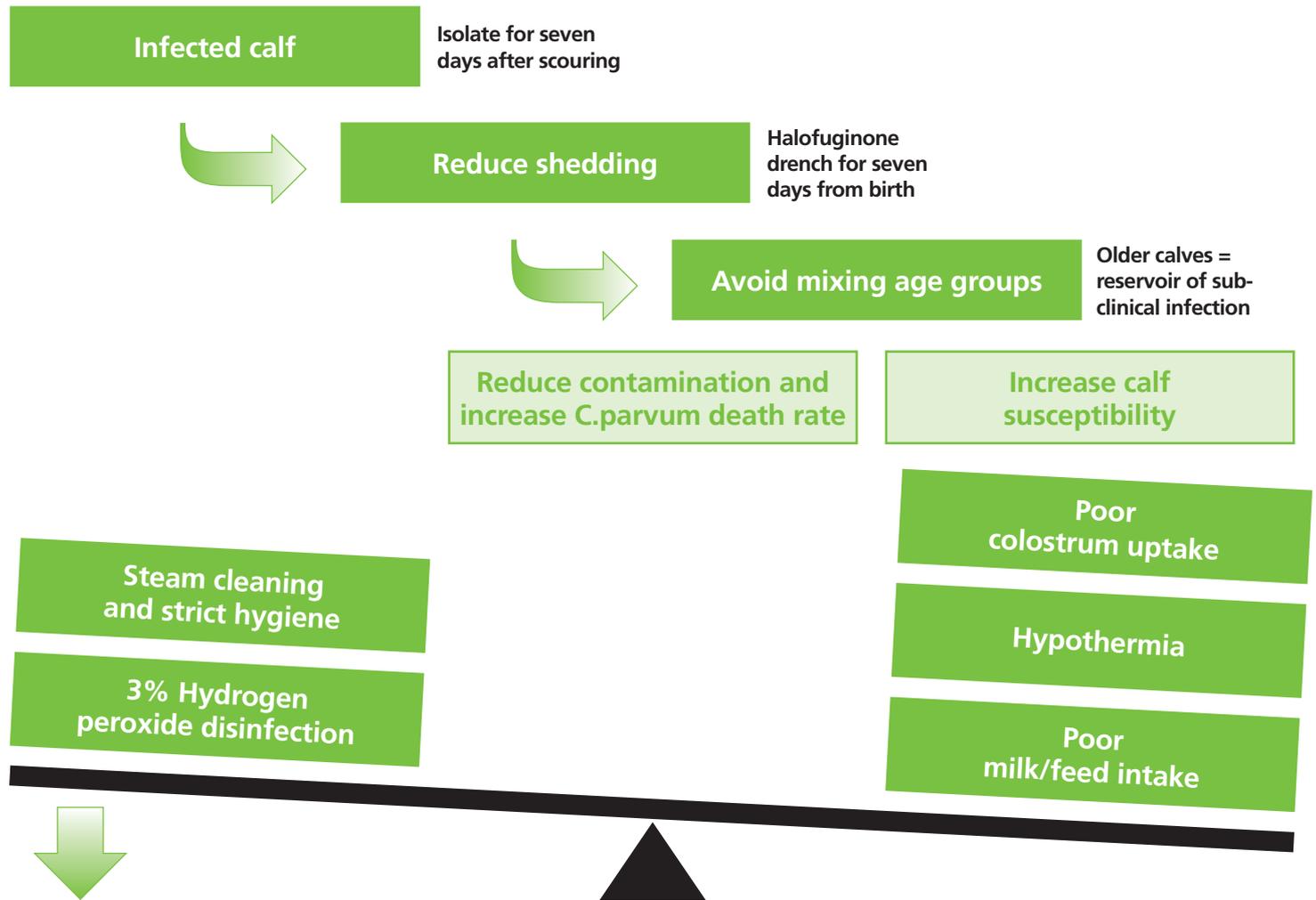
The *Cryptosporidium parvum* parasite multiplies rapidly, completing its life-cycle in two to seven days, damaging the gut lining (intestinal mucosal epithelium). The parasite develops in the protrusions (microvilli) of the epithelial cells that line the intestinal wall. Severe infection causes the folds of the intestinal wall to fuse and waste away.

Malabsorption results in a profuse yellow scour and dehydration in calves less than three weeks old as well as poor weight gain.

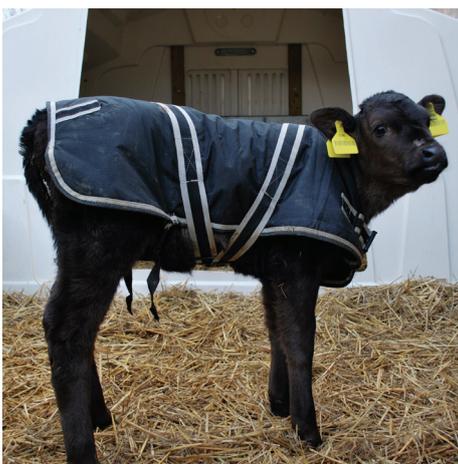
Some thin walled eggs (oocysts) hatch in the gut and the parasites released then re-infect the gut lining (auto-infection). The immune status of host decides if auto-infection occurs and if the disease results in death.



Break the infection transmission chain



And tip the balance back in your favour!



Cryptosporidiosis top five

1. Cryptosporidiosis is the most common cause of calf scour: your vet can diagnose infection from a scour sample.
2. Reduce oocyst numbers by steam cleaning and 3% hydrogen peroxide.
3. Reduce oocyst shedding from calves using a halofuginone drench.
4. Improve calf health by ensuring good colostrum uptake and proper feed intakes.
5. Check calf environment to ensure good drainage, ventilation without draughts and use calf jackets.



For further information contact your local XLVets practice