

SOME COMMON INFECTIONS WHICH CAUSE CALF SCOURS

Infections present on every farm:

Infection	% of farms infected	Typical age of calf affected	Duration and characteristics of scour	Protection against scour	Common source of infection/ ease of elimination	Additional information
Rotavirus	42%	7 days onwards	Calves scour for 1-2 days, but can be up to 8 days. Mild moderate scour, yellow in appearance causes mortality and checks growth.	Fed adequate colostrums. Vaccinate cows and feed antibody rich colostrums to newborn calves.	Very resistant to disinfectant but susceptible to drying.	Virus destroys tips of the villi in the small intestine.
Cryptosporidium	23%	Earliest cases at 5-7 days. Relapses common after 1 week	Calves scour for typically 7 days but can be longer. Profuse and watery scour.	Colostrum may not give protection. Age resistance develops after 3 weeks.	Resistant to disinfectant.	Can infect humans. No drugs are effective in treatment.
Coronavirus	12%	2 nd week onwards	Scouring is severe and causes rapid death in young calves. Older calves are severely debilitated.	Colostrum may give protection.	Adult animals may be carriers and shed virus at calving (infecting calving area). Virus is susceptible to disinfection.	Is more severe than rotavirus as affects all the intestine and the whole of the villi.

Infections present of only some farms:

Infection	% of farms infected	Typical age of calf affected	Duration and characteristics of scour	Protection against scour	Common source of infection/ ease of elimination	Additional information
Salmonella	11%	10 days to 3 months	Blood and mucus in scour, animals have a high temperature. Causes high mortality.	Acid production in stomach which is fully developed by 6 weeks offers some barrier to the pathogen.	Adult animals may be carriers for Salmonella Dublin. Bought in calves may be a source of infection for salmonella typhimurium.	Stress precipitates disease. Can infect humans. Antibiotic treatment can be used.
K99 E Coli	4%	1 – 5 days	Very severe watery scour causing collapse and marked weight loss. Death occurs in 12 – 24 hours in half of all calves.	Vaccination of dam with K99 E Coli vaccine.	Main source of infection is from contaminated environment – especially dirty calving area.	K99 E Coli produces a toxin which causes an outpouring of fluid into the gut. Antibiotic treatment can be used.