

COCCIDIOSIS IN CALVES



WHAT IS IT?

- A gut infection that typically affects calves less than 6 months old.
- Rarely fatal, but associated with extensive gut damage and ill-thrift
- Disease most commonly seen under intensive management conditions with high stocking rates (either indoors or outdoors).

SYMPTOMS

- Usually affects group-reared calves at around 8 12 weeks of age (ie. after weaning).
- Although only a few calves may show clinical signs, the majority of calves are likely to be subclinically affected with reduced growth rates.
- Most obvious sign in affected calves is diarrhoea containing mucus and blood, with frequent straining to pass faeces (which may result in a prolapsed rectum). Mild cases may only have watery faeces will no blood present.



- Within a group of calves, the most common clinical signs are likely to be poor body and coat condition with reduced growth rates. Only a few calves may show obvious signs of diarrhoea.
 WHAT CAUSES IT?
- Coccidia are host-specific intracellular parasites that damage the lining of the caecum and large intestine.
- There are 13 different species of coccidia that can infect cattle, but only three (*E. zuernii, E. bovis* and *E. alabamensis*) that actually cause disease.
- Calves pick up infection from contaminated environment, and then shed large numbers of eggs (called oocysts) into the environment after approximately 2-3 weeks.
- Oocytes can survive for more than a year in favourable conditions (i.e wet and in the absence of extreme temperature). Most outbreaks occur due to a build up of resistant ooyctes on contaminated pasture or bedding if housed.

DIAGNOSIS

- Usually based on clinical signs in 2-3 month old calves under intensive management conditions.
- Faecal oocyst counts over 5,000/gram are suspicious, but care is needed in interpretation. For example these oocysts may be from non-pathogenic species, and in the early stages of disease affected calves may shed very few oocysts.

TREATMENT

- Affected calves should be separated to reduce contamination of the environment with more oocysts.
- A number of anticoccidial drugs are available for treatment of affected calves including toltazuril (BaycoxTM) and diclazuril (VecoxanTM), which should be used under direction from your vet.
- Severely affected animals may need oral fluids if severely dehydrated, although such cases are rare.

• Consideration should be given to treatment of all calves in the group to reduce subclinical disease. PREVENTION

- Limiting the build-up of oocysts in the environment will help reduce the chances of infection. Measures include reducing the stocking density, changing paddocks, regularly cleaning/moving feed and water troughs to avoid mucky contaminated areas, keeping pens clean and dry etc.
- Ideally an all-in, all-out system with thorough cleaning and disinfection of pens after each batch of calves will help reduce the build-up of infective oocysts in the environment.
- Treatment of all at-risk calves in the group with an anticoccidial drug at strategic intervals (say at 6-8 weeks of age, and then again 3-4 weeks later if necessary) under veterinary guidance.
- In-feed medication of calf feed using decoquinate (DeccoxTM) during at-risk periods can also be used, although it should be fed continuously for at least 28 days.

If you have any suspect cases, you should seek advice from your vet as soon as possible.

Dairy Herd Health & Productivity Service (DHHPS) Jan 2011 Telephone 0131 651 7474 Fax 0131 651 7473; e-mail dhhps@ed.ac.uk; www.ed.ac.uk/vet/dhhps