

## Enteric Coccidia in Calves

Coccidiosis due to *Eimeria* is most common in young or naïve calves. More than a dozen species parasitise cattle, however only a few of these are considered primary pathogens although the remainder are hypothesised to be synergistic in causing disease.

Not all exposed animals show clinical signs. When oocyst ingestion is low, calves develop immunity with subclinical disease. Exposure to moderate numbers of oocysts may reduce growth rates without causing diarrhoea and high exposure or concurrent stress (weaning, inclement weather) result in diarrhoea with or without blood (depending on the species), tenesmus, weight loss, etc. Additionally, with severe infections, animals may take a long time to recover from extensive damage to the intestinal mucosa and may have long lasting decreased growth rates.

Coccidiosis is most often seen in calves several weeks after they are first turned out onto contaminated pasture so is more common in animals 3-8 months old, however, animals as young as 4 weeks may be affected. Older animals may become infected if they are naïve or immunosuppressed. Oocysts on pasture may have survived from the previous year or are due to increased shedding in periparturient cows, however, infected calves are the main source of pasture contamination.

### Diagnosis

The diagnosis of coccidiosis is often based on examination of a faecal sample; although, intestinal mucosal damage precedes oocyst excretion by about two days. Consequently, a faecal sample taken early in the course of infection may produce a negative or low positive result and may not accurately reflect the severity of infection and damage to the gut.

