



CCPA

Delacon

Dr BATA

Henke-Sass Wolf

Olmix

Wisium/Neovia

## Diagnosis

The microscopic identification of cryptosporidial oocysts in the faeces of affected calves is needed for a diagnosis to be made. This requires a trained technician using a standard flotation technique. Immunofluorescence, ELISA and PCR can also be undertaken and these newer techniques are thought to be more sensitive than traditional microscopy.

In epidemiological cases and ones where there is a zoonotic implication, genetic analysis of isolates can be undertaken.

## Treatment

Treatment focuses on being supportive and is basically fluid replacement therapy plus the feeding of a quality source of nutrients, such as milk or a high quality milk replacer. Oral electrolyte replacers can be used during the acute diarrhoeal phase but they should not be the only source of nutrients for more than a day. If calves are left outside in winter extra consideration should be given to keeping them warm.

Antibiotics are not indicated unless mixed bacterial infections involving some pathogens are present. Many drugs have been tested against cryptosporidia but none have been found to be both effective and economically justifiable. Of the anticoccidials, only lasalocid has been shown to be effective – but at levels toxic to calves.

## Control

Prevention has a very important role and many farms fail on this front once environmental contamination with this pathogen has become high. Important sources of infection include diseased calves and spread by farm staff and equipment. As it takes a low dose of cryptosporidia to infect a calf, morbidity rates can be very high.

Control centres around reviewing management practices, including hygiene of the calving area, colostrum management, cleaning of feeding equipment, calf accommodation and surrounding ground, allocation of labour and the order in which farm staff feed and handle the calves.

Ideally young calves should be housed individually rather than in groups and separated at birth from their mothers and placed in cleaned and disinfected pens/hutches.

As cryptosporidial oocysts are very resistant to disinfectants, extra attention must be given to the scrubbing and cleaning of everything. However, some of the newer peroxygen based disinfectants have been shown to reduce the infectivity of cryptosporidial oocysts.

Exposure of cleaned hutches to sunlight can also be beneficial.