

COCCIDIOSIS: SWINE

Pathology description

Coccidiosis in the pig is caused by a parasite called *Isospora suis*. There are a range of other coccidia (e.g. *Eimeria* sp), often found in the pig, but these are generally thought to be harmless although in rare cases can cause disease in young adults. The parasite has a direct lifecycle between pigs (i.e. there is no intermediate host) with Oocysts shed from an infected individual into the environment, in which they undergo a temperature dependant sporulation process, before infecting other animals orally.



Figure 1: Unsporulated (left) and sporulated (right) oocyst

The organism then colonises the small intestine, developing through a number of stages and causing gut damage leading to scour. This process takes several days and, as such, Coccidiosis does not occur below 5 days of age, and most typically is not seen until 10 days old.

Symptoms

- **Sows:** None, sows are carriers
- **Piglets:** Diarrhoea is the main clinical sign in early stages. In later stages the faeces vary in consistency and colour from yellow to grey green, or bloody according to the severity of the condition. Dehydration is common.
- **Weaners & Growers:** Poor growth, sloppy diarrhoea may be seen, faeces / diarrhoea may occasionally be tinged with blood.



Figure 2: piglets with typical diarrhoea

Costs of the disease

- Poor daily weight gain
- Increased feed cost
- Treatment costs

Vectors

- **Environment**

Contaminated pig houses and farrowing houses

- **Material**

Contaminated equipment

- **Animal**

Sows faeces are one source of infection and it is important that they are removed daily from the farrowing house.

- **Feed and drinking water**

Coccidiosis is spread between pigs by the consumption of food or drinking water contaminated by faeces containing the infective stage of the coccidia which are known as oocysts.

- **Working method**

Poor hygiene in farrowing pens, continually used houses without cleaning and disinfection. Coccidiosis could be spread between sites by man.

→ MAIN VECTOR: Contaminated environment. Oocysts are very resistant in farrowing houses

Preventive action

- Hygiene
- Rodent and insect control
- Remove sow and piglet faeces daily.
- Ensure as far as possible that slurry channels are completely emptied between farrowings.
- Keep pens as dry as possible and in particular those areas of the floor where the piglets defecate.

Controlling action

For this to be effective the medication must be given just prior to the invasion of the intestinal wall. Once clinical signs have appeared the damage has been done.

Advised Protocols



HOUSING
HYGIENE



PERSONAL
HYGIENE



TRANSPORT