

NADIS disease bulletins are written specifically for farmers, to increase awareness of prevalent conditions and promote disease prevention and control, in order to benefit animal health and welfare. Farmers are advised to discuss their individual farm circumstances with their veterinary surgeon.

## Swine Dysentery

Scour (diarrhoea) in growing pigs is now a very common finding on many farms. Historically, Swine Dysentery has been recognised as a severe bloody mucoid scour in pigs, usually between 10 and 20 weeks of age, whilst milder disease has been categorised as colitis, either of dietary origin or due to bacteria related to that which causes Swine Dysentery. However, in recent years, it has become evident that mild forms of Swine Dysentery occur making it very difficult to differentiate.

### Cause

Swine Dysentery is caused by a bacteria called *Serpulina hyodysenteriae* which is acquired orally and attacks the lining of the large intestine (colon) causing a variable amount of damage. Large quantities of the bacteria are shed in the faeces, thus acting to recycle the disease and spread it to other animals.

### Clinical Signs

Whilst the disease is most commonly seen in growing pigs of 10-20 weeks old, it can occur in any age (from 10 days to adults) in a naïve population. In its typical form, the following will be seen:-

- 1) Rapid loss of condition with hairy appearance and slab sided belly.
- 2) Production of profuse liquid faeces containing variable amounts of fresh blood and mucous (jelly).
- 3) Death usually occurs in later stages of the disease.
- 4) In an endemically affected farm, secondary disease will be prevalent e.g. pneumonia.
- 5) In milder forms there may be no blood or mucous in the diarrhoea and pigs may present with little more than grey diarrhoea running out of the anus and some modest loss of condition.

In a permanently occupied farm (e.g. breeder feeder unit) the disease will persist, causing continual problems to the susceptible age groups as they come through the system. It is rare in such situations for the disease to “burn itself out”.

Diagnosis of Swine Dysentery can only be confirmed by laboratory tests with a test based on DNA identification (PCR) that most reliable. The commonly used FAT test has a propensity for throwing up false positive results.

### Treatments

Lincomycin and Tiamulin are the two most effective antimicrobial agents available (although occasionally tylosin is effective). In some herd situations, the disease may be complicated by other enteric pathogens e.g. Salmonella and in such cases more exotic combination of treatment may be appropriate.

Individual cases are treated by injection and groups preferably by water medication. For treatment of active disease, in feed medication is often not appropriate due to delays in obtaining supplies, high dose rates needed and reduced appetite due to disease.

In a known infected environment or in situations where the disease is anticipated, prophylactic use of in feed medication is necessary.

It is not unknown for resistance to occur, rendering treatment very difficult.

### **Control**

Where the disease is endemic, a combination of hygiene measures – involving washing and disinfection of buildings and strategic medication is appropriate.

There are many instances where the disease has been eradicated from a herd by a specific programme of treatment and cleaning and experience shows such programmes to have a success rate of approximately 50%.

Where the disease is active and imposing serious economic constraints on the farm, depopulation and re-population with “clean” stock is appropriate. It is important in such programmes to remove all faecal material from the farm (including slurry channels), thoroughly wash and disinfect and rest the farm for a minimum of 8 weeks between the last pig leaving and the first arriving. Rodent control is vital as both rats and mice can carry the infection.

Many farms are free of Swine Dysentery and close attention to herd security is highly effective at maintaining such a status. Knackermen and cull sow collections have been implicated in many herd breakdowns.

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