



Swine dysentery is one of the most economically damaging diseases a farm can experience, and can cost more than £10/pig finished when the costs of permanent medication, mortality and non-marketable pigs is added to feed costs. Swine dysentery usually affects growing and finishing pigs and is characterised by bloody diarrhoea along with mucus. This is caused by infection with the bacterium *Brachyspira hyodysenteriae* which causes severe inflammation of the large intestine.



To effectively control endemic swine dysentery and move towards achieving a swine dysentery free herd

To improve the growth and efficiency of the growing herd

To improve animal health in both short and long term

Impact of the disease

The high cost of disease is associated with mortality, morbidity, reduced growth rates, poor feed conversion efficiency, and costs of continual in-feed medication.

Clinical signs

- Diarrhoea containing blood and mucus, becoming watery and foul smelling
- Rapid loss of condition
- Death in later stages
- In herds that break down for the first time sows can develop diarrhoea (often without blood) and piglets aged two to three weeks can be affected with dysentery
- In clinically affected sows infertility problems are possible
- You may see no clinical signs (eg outdoor breeding units), with signs only being seen in progeny finishing off site - may need intensive sampling of breeding herd to detect the infection



Grower pig with early dysentery



Swine dysentery diarrhoea

How is swine dysentery transmitted?

B. hyodysenteriae live in the large intestine and are passed out with the dung. Pigs that eat the contaminated dung will pick up the infection. This is why hygiene is such an important part of dysentery control and why it is so easily spread around a farm by people on their boots or implements. Swine dysentery is also spread from farm to farm by drivers and lorries which have carried infected pigs and which have not been washed and disinfected properly afterwards. The most common way of spread is by bringing infected pigs onto a clean farm. Don't forget that if your herd is infected there is a risk of transmission to other farms even if the disease is controlled by medication and even during the process of a depopulation.

There are a number of other reservoirs for the infection on an infected farm, for example:

- *B. hyodysenteriae* can live in manure and slurry for up to 60 days in cold weather; this is why it is more common to attempt eradication programmes in the summer, when the higher temperatures help kill the bacteria in the environment and reduce contamination
- A number of farm animals may carry the organism for a short while and dogs, birds and flies can also physically carry the infection from pen to pen
- *B. hyodysenteriae* can infect, and be carried by, rats and mice, so ensure you have an effective rodent control plan in place
- Seagulls and starlings have been incriminated in spreading the infection from farm to farm, especially between outdoor units
- The infection can survive on the feet of flies for around an hour and they can carry the infection between dung and food



Seagulls and starlings have been incriminated in spreading the infection



Effective cleaning and disinfection is advisable

Management guidelines

- Hygiene, cleaning and disinfection (see *Action for Productivity 10: Cleaning and disinfection*) are key in controlling the spread of this and many other diseases, as both thorough drying and disinfection will kill the organism
- Eradication can be carried out through appropriate treatment and effective cleaning and disinfection; work with your vet to devise a programme that would suit your farm and situation
- Maintain a strict biosecurity policy (see *Action for Productivity 13: Biosecurity*) to keep disease out
- Ensure you maximise herd security; know the status of pigs coming on to your unit and where vehicles entering your site have been, eg cull sow collections and feed delivery
- Effective rodent control should be established and dogs and cats should be kept out
- In herds already infected you should aim to prevent the movement of the organism between groups of pigs, eg all-in all-out systems
- In some cases where the disease is having a significant economic impact and control is not an option, a full depopulation and repopulation with 'clean' stock may be required to eradicate the disease
- A number of medicines have an activity against *B. hyodysenteriae*, discuss these and options for control and prevention with your veterinarian



Maintain a strict biosecurity policy to keep disease out

Diagnosis

Diagnosis of swine dysentery requires laboratory testing of faeces or gut contents; speak to your veterinarian if you suspect that swine dysentery may be present on your unit.

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