

# SWINE DYSENTERY

## Pathology description

An anaerobic bacterium, *Serpulina (or Brachyspira) hyodysenteriae* is the cause of swine dysentery. Swine dysentery is a common, micro hemorrhagic diarrheal disease of pigs that affects the big intestine.

As the disease progresses, blood may be lost through the damaged intestinal wall. Death usually results because of the dehydration and a loss of electrolytes.

The most common mode of transmission of swine dysentery is the carrier pig. *Serpulina hyodysenteriae* is present in the feces of pigs that are either affected with, or have recovered from, swine dysentery. After susceptible pigs ingest the organisms, symptoms of swine dysentery usually occur in 2 to 21 days. The incubation period is shortened by the ingestion of larger numbers of *S. hyodysenteriae*.

## Symptoms

- **Sows:** Clinical disease in sows is uncommon unless new disease appears in the herd. Mostly sows become symptomless carriers.
- **Piglets:** Severe acute dysentery may occur:
  - Sloppy light brown faeces with or without mucous or blood.
  - Loss of condition.
- **Weaners & Growers:**
  - Sloppy diarrhoea, which stains the skin under the anus.
  - Initially the diarrhoea is light brown and contains jelly-like mucus and becomes watery, after a while blood may appear in increasing amounts turning the faeces dark and tarry.
  - Hollowing of the flanks with poor growth.
  - Partial loss of appetite.
  - Slight reddening of the skin.
  - Becomes dehydrated.
  - A gaunt appearance with sunken eyes.
  - Sudden death sometimes occurs mainly in heavy finishers.

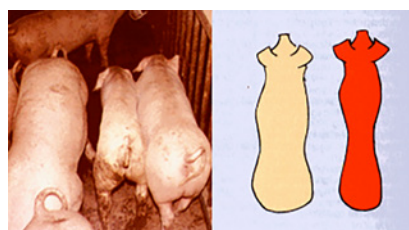


Figure 1: typical hollowing of the flanks

## Costs of the disease

- Increased feed cost
- Mortality
- Less weight gain

## Vectors

- **Environment**  
Initial exposure takes place when pigs are placed on a site that has been contaminated with *S. hyodysenteriae*.
- **Material**  
Contaminated equipment, boots, trucks,...
- **Animal**  
The main source of infection is the pigs themselves, which contaminate their own environments. Also rodents or insects (flies) can spread the germ.
- **Feed and drinking water**  
*The consumption of food or drinking water contaminated by faeces containing S. hyodysenteriae.*
- **Working method**

Insufficient cleaning and disinfecting of the barns.  
Overcrowding

→ MAIN VECTOR: contaminated pigs

## Preventive action

- Hygiene: cleaning and disinfecting of barn, let dry before new animals are entering
- Rodent and insect control
- Keep pens as dry as possible and in particular those areas of the floor where the piglets defecate.
- All-in-all-out principle
- Putting new boars and gilts in quarantine

## Controlling action

A wide variety of drugs is available for the treatment of swine dysentery, administration of these drugs must happen under the advice of your veterinarian.

## Advised Protocols

For every possible vector, a hygiene protocol must be implemented. See these Specific Purpose Protocol:



HOUSING  
HYGIENE



PERSONAL  
HYGIENE



TRANSPORT