



Swine dysentery outbreaks were diagnosed during 2018 in several regions of England and Wales. This leaflet provides key information about this disease for pig keepers and vets

Swine dysentery – the disease and its cause

- Swine dysentery is a bacterial disease of pigs caused by *Brachyspira hyodysenteriae*
- It results in **diarrhoea** and **weight loss** which severely limits productivity
- Diseased pigs take longer to reach slaughter weight and the farm's productivity and economic viability is compromised
- Infected pigs, their faeces, manure and anything contaminated with manure from infected pigs (vehicles, boots, slurry, equipment) can **spread infection** between farms
- The disease is a particular threat to farms selling pigs for breeding; if these become infected their international and UK trade is devastated
- An infected pig farm is a risk to other farms within the local area and also in other regions due to the various methods of spread
- Resistance to the limited range of treatments for swine dysentery can develop. In occasional cases, the swine dysentery organism was **resistant** to all available treatments

Swine dysentery – clinical signs

Swine dysentery tends to cause most obvious disease in growers, finishers and younger breeding stock, with low to moderate mortality. Although swine dysentery is described as causing mucohaemorrhagic colitis, blood and mucus are not always evident and the severity of disease is affected by age of pigs, immunity, diet, concurrent disease and the strain of *B. hyodysenteriae*.



Figures showing swine dysentery: A - Diarrhoea in finisher pig, B – large intestine showing thickening, with colitis and diarrhoea, C – wasted finisher

Swine dysentery incidents

During 2018, cases of swine dysentery were diagnosed in several counties in England (North, South and West Yorkshire, East Riding, Lancashire, Somerset, Worcestershire, Norfolk, Devon) and in Wales. These incidents are not a measure of the number of herds already infected with swine dysentery and tend to reflect the spread of disease to new herds. The interactive pig GB disease surveillance dashboard has surveillance information about cases diagnosed: <http://apha.defra.gov.uk/vet-gateway/surveillance/scanning/disease-dashboards.htm>.

If a pig keeper sees unexplained diarrhoea and wasting, especially if the diarrhoea contains blood or mucus, they should contact their vet immediately for advice. Diagnosis is achieved by vets sending faeces or pigs for laboratory testing; both *Brachyspira* culture and PCR are recommended. If *Brachyspira hyodysenteriae* is isolated, antimicrobial sensitivity testing is currently undertaken at no charge by APHA. Prompt diagnosis is important so that suitable control measures are quickly implemented which helps limit spread of the infection. Guidance on sampling for diagnosis is available on this link: <http://apha.defra.gov.uk/documents/surveillance/sub-handbook.pdf>.

Swine dysentery control – pig industry initiatives

IMPROVING FARM BIOSECURITY: Regular on-farm biosecurity audits with your vet to identify and address weak points are key to preventing an outbreak of swine dysentery and limiting spread if your pigs become infected. Maintaining good biosecurity has the wider benefit of reducing the risk of introduction and spread of other diseases including salmonella and PRRS. There is biosecurity advice on the AHDB Pork website <https://pork.ahdb.org.uk/pig-production/biosecurity/>. Specific guidance on swine dysentery is available at: <http://pork.ahdb.org.uk/health-welfare/health/swine-dysentery/>.

IMPLEMENTING LORRY WASHING STANDARDS: Abattoirs are an area where there is potential for cross contamination of vehicles and this can be prevented with effective cleaning and disinfection. It is a requirement of the BQAP assurance scheme that pig lorries must be thoroughly cleaned and disinfected before leaving the abattoir.

DECLARATION OF DISEASE OUTBREAKS: Pig producers are encouraged to sign up to the AHDB Pork Significant Diseases Charter (formerly Swine Dysentery Charter) which helps producers by sharing information about new swine dysentery outbreaks: <https://pork.ahdb.org.uk/health-welfare/health/significant-diseases-charter/>.

Exotic *Brachyspira* species causing diarrhoea in pigs

In recent years, new *Brachyspira* species, *B. suanatina* and *hampsonii* have been detected in Europe causing diarrhoea, and occasionally dysentery, in pigs. These have not been detected in GB pigs to date. Diagnostic tests at APHA and SRUC Veterinary Services for *Brachyspira* species (culture and PCR), used for swine dysentery and *B. pilosicoli* can detect *B. suanatina* and *hampsonii* and this highlights the importance of diagnosing the cause of diarrhea outbreaks.

Control measures for swine dysentery are also invaluable in preventing notifiable disease such as swine fever or porcine epidemic diarrhoea.

The key messages are clear – take all precautions to prevent entry of diseases like swine dysentery and, if you see suspicious signs, contact your veterinary surgeon immediately.