

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.

Piglet Septicaemia

Septicaemia is the medical term for blood poisoning and occurs commonly in baby piglets. It usually results from the introduction of bacteria into the body in the newborn that circulates in the blood stream. Passive immunity acquired from the mother in colostrum will protect against such infection gaining a hold and, thus, there is a strong association between colostrum intake and the incidence of septicaemia.

In some cases, the infection will affect all parts of the body causing rapid death; in others, it may settle out in joints – causing joint ill or polyarthritis – or the brain – causing sporadic meningitis.

Incidence

The incidence is highly variable between farms although, if anything, it is under-recorded, piglets in the first 7-10 days of life found dead close to the sow are often simply recorded as “overlain”.

Accurate diagnosis on some farms suggests that the incidence of septicaemia may be 2-5% of all deaths, representing half a pig per litter or more dead. If fully costed, the value of a newborn pig to a breeder feeder farm will be £35 per pig (cost of production plus fixed costs for rearing and growing) and, therefore, to a 300 sow breeder feeder farm the annual cost can be £12,000 or more. Even at a sporadic level, the costs can be substantial.

Causes

When born, there is an obvious route of infection into the body via the navel. The risks will be increased if the environment to which the pig is born is heavily contaminated. Therefore, hygiene plays a major role. Management tasks such as teething and tailing also open up routes of access to the blood stream as will fight wounds as piglets compete for a teat. Damage to feet by abrasion on rough floors in the first 24-48 hours of life opens up a similar route of entry. Bacteria involved are largely environmental/faecal contaminants such as E coli, Streptococci, Staphylococci, C. pyogenes.

Presentation

A septicaemic pig will have a raised temperature and will often feel hot to touch. Breathing will be fast and shallow and the pig will be very depressed, isolated and huddled. They will usually squeal in discomfort when handled. They will rapidly deteriorate with the temperature falling although death may occur before this happens. Some pigs will be killed by the sow by crushing, simply because they are unwilling or unable to get out of the way. The disease is often too acute to allow significant weight loss. The extremities and abdomen will usually be discoloured (red to purple). Occasionally, the baby pig may resist the initial acute infection but die suddenly late in the sucking period. Post mortem examination will reveal extensive damage throughout

the body, affecting chest, abdomen and joints. The remnants of the navel may have some evidence of abscessation.

Prevention and Control

The prevention of septicaemia in piglets is entirely a husbandry matter. All efforts must be made to minimise the levels of contamination met by the pig soon after birth.

To this end:-

- 1) Farrowing pens must always be cleaned, preferably with a detergent, disinfected and dried before use. The use of a flame gun to burn off residual infection may be of value. In the outdoor environment, moving arcs between farrowing and burning or removing the previous beds is essential.
- 2) Do not crate sows into a clean farrowing pen too early – 5 days is adequate. Physically remove all sow faeces, as and when seen. Remember that slats in farrowing pens are designed to drain liquid not solid sow manure!.
- 3) Dress navels of newborn pigs with iodine by dipping – this must be done at birth.
- 4) Dress tails with iodine following docking.
- 5) Use and maintain tools for teething and tailing in a clean manner. Do not use the same tools for both jobs – the mouth is heavily contaminated and it is easy to spread infection to the tail wound.
- 6) Clip teeth singly rather than in pairs to avoid shattering teeth.
- 7) Maximise colostrum intake. It is vital that all piglets receive a full complement of colostrum within 6 hours of birth. Unfortunately, the quality and quantity of colostrum available to piglets at the end of the farrowing process is less than at the beginning and, therefore, they are at greater risk. Each piglet should receive 50-60ml of colostrum in the first 6 hours and it may be beneficial to milk off surplus colostrum from some sows, store in a freezer and use on compromised pigs (do not use a microwave to defrost it!).

Split suckling, shift suckling, assisted sucking are all useful, if time consuming techniques, to improve colostrum intakes.

The use of proprietary colostrum replacement products – mostly derived from cattle – is favoured by some producers, although there is no substitute for the real thing.

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Producers should review their farrowing house management, consult with their veterinary advisors to establish the true causes of piglet deaths and to draw up a detailed programme of hygiene and colostrum management that will minimise losses in the future. A few hundred pounds spent on sound advice will be royally repaid.

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