Pig Owner's News for the





Brucellosis December 2020

Brucellosis is a venereal disease that infects pigs most commonly during mating. The timing of the infection will determine the clinical signs seen in sows. Infections acquired near breeding may cause infertility and an irregular return to oestrus. If the sow is exposed during late gestation, this may result in abortion, stillbirths or weak liveborn piglets.

Infection with Brucellosis involves the organism Brucella suis colonising in various sites including regional lymph nodes, placenta, mammary glands and testes.

<u>Clinical Signs</u>: Brucellosis may present in sows as abortions, infertility (won't become pregnant after numerous attempts with a proven fertile boar) or severe metritis. In boars, it may present as orchitis (swollen, inflamed testes) or infertility. Pigs, particularly piglets and weaners, may show lameness with swollen joints and incoordination or hind leg paralysis.

Brucellosis is common in many parts of the world, but not very common in Australia. Brucella bacteria infect a range of animals. *Brucella suis*



usually infect pigs. *Brucella suis* infection is widespread in Queensland's feral pig population. It is endemic in the feral pig population in northern NSW, with the extent of the spread into the feral pig populations in other regions of NSW unknown.

The most likely method of entry of *Brucella suis* into a domestic pig herd is through contact with feral pigs. Good biosecurity is essential to limit contact between feral and domestic pigs and this involves constructing pig-proof perimeter fences and controlling local feral pigs.

Infection can occur after ingestion of contaminated aborted piglets or uterine discharges. Infection can also spread during mating or after ingestion of contaminated feed, water, manure or bedding. *Brucella suis* can also be spread on

contaminated equipment and clothing. Under ideal conditions of low temperature, high humidity and no sunlight, it can survive for several months in the environment.

<u>Diagnosis</u> is based on clinical evidence and serological testing (blood test) or bacterial culture

Leptospirosis can also result in small litters, stillborn or weak piglets, abortions and fertility issues, so must be differentiated from Brucellosis.

<u>Management</u>: There is no vaccine and there are no successful treatments available, so to prevent further spread, the most appropriate course of action is total depopulation with rigorous cleaning and allowing facilities to remain empty for 3 months prior to restocking.

Prevention is via preventing feral pigs from contacting domestic pigs by having pigproof fences and controlling local feral pig populations.

Zoonosis: Brucella suis can be transmitted to people. Feral pigs are the usual source of infection, especially via contact through breaks in the skin with body fluids or tissues (blood, urine or aborted foetuses) of infected pigs. The bacteria may also, less commonly, be inhaled. Feral pig hunting is the highest risk for catching brucellosis in NSW. Pig hunting dogs are also at high risk and can potentially pass on the infection to other dogs and humans. Brucellosis infection in humans can cause long-lasting health problems and even death, if it is not diagnosed and treated quickly.

It is an offence to transport, keep (even if just for your own consumption) or release live feral pigs, and any suspect behaviour should be reported to your local LLS office or the police.

Brucellosis (*Brucella suis*) is a notifiable disease under NSW legislation. This means there is a legal obligation to notify Local Land Services (1300 795 299) or a NSW DPI vet or regulatory officer, if you know or suspect that an animal has this disease.



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