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Queensland
Government

Business Queensland (<https://www.business.qld.gov.au>)

Brucellosis

Alert



Brucellosis is category 1 restricted matter.

Under Queensland legislation, if you suspect the presence of this disease in any species of animal, you must report it to **Biosecurity Queensland on 13 25 23** or contact the **Emergency Disease Hotline on 1800 675 888**.

Brucellosis is a bacterial disease of animals that can affect people. In general, the disease causes reproductive failure, such as abortion or the birth of unthrifty offspring in female animals and infection of the reproductive tract and sterility in males. This is a serious zoonotic disease (<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/biosecurity/animals/diseases/manage/zoonosis>) causing illness in people.

Brucella abortus no longer occurs in Australia as a result of a national eradication program between 1970 and 1989.

Brucella ovis infection causes disease and infertility in sheep, but does not affect people. It is present in the Australian sheep industry.

Domestic, wild or feral pigs are primarily affected by *Brucella suis* with infertility resulting. Cattle and horses may be infected if they share an environment with feral pigs. Infection has occurred in dogs from eating raw pig meat.

The disease in humans

Brucella suis mainly affects abattoir workers, pig farmers and feral pig shooters. It occurs less often in humans since infection has been eradicated from the commercial pig industry.

Humans can contract the disease through skin, conjunctiva and by ingestion. Conditions of killing and field preparation of feral pigs increase the risk of human infection unless strict hygiene measures are taken. This also applies to those who choose to eat feral pig meat. Infection can occur from contaminated meat during preparation, cooking and serving.

Scientific name

Brucella suis

Distribution

It is widespread in Queensland's feral pig population.

It also occurs commonly in the United States and most other countries but not Canada or the United Kingdom.

Life cycle

The incubation period in people is variable from 5 days to months but averages 2 weeks. Weakness, fatigue and exhaustion are common with fever, head and body pains and mental depression.

Anyone who suspects they may have been infected with *Brucella suis* should contact their doctor.

Recovery can take up to 12 months, but antibiotics shorten the disease course.

Affected animals

- pigs
 - cattle
 - horses
 - dogs
 - humans
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Clinical signs

Pigs

The signs of infection with *Brucella suis* in pigs are variable as the bacteria localises in other parts of the body as well as the reproductive organs. The most prominent consequences are:

- reproductive failure in sows, including infertility, irregular oestrus and abortion
- heavy mortality in piglets from stillbirth and death of weak piglets within a few hours of birth
- orchitis of one or both testicles of boars develops with swelling and necrosis

- lameness, incoordination and posterior paralysis.

Cattle and horses

Cattle may pick up infection from open waters frequented by feral pigs. There are no specific clinical signs associated with *Brucella suis* infection. However, both cattle and horses may react positively to brucellosis testing due to infection with *Brucella suis*.

A positive test result for *Brucella* in cattle, typically during a herd fertility test, must be investigated to ensure that it has not been caused by *Brucella abortus* (bovine brucellosis).

How it is spread

The main source of infection is the infected pig, whether domestic or wild. The organism localises in the genitalia of the boar therefore venereal transmission is important. Spread can also occur by the ingestion of food and water contaminated with urine, placenta and discharges from infected sows at farrowing. The organism is moderately resistant to environmental effects. It will survive in faeces, urine and water for 4-6 weeks and much longer in freezing conditions. Direct sunlight will kill the organism quickly.

Monitoring and action

Blood testing for *Brucella* may be conducted, but is not specific for *Brucella suis*.

Material can be taken for culture from an aborted foetus, testicular lesion, abscess, lymph node and blood. In cattle, *Brucella suis* has been isolated from the ovaries, supra-mammary and many other lymph nodes.

Control

Control in a domestic pig herd relies on the blood sampling of the whole breeding pig herd and removal of the reactors.

The disease can be eradicated by whole-herd destocking and restocking after decontamination.

Vaccination

There is no vaccine available.

Prevention

Secure biosecurity to prevent the entry of feral or other infected pigs into a domestic piggery is essential.

The keeping of feral pigs is prohibited as they are invasive pest animals. They are also a significant risk as a source of brucellosis infection for people.

Further information

- [Contact our Customer Service Centre \(https://www.daf.qld.gov.au/contact\)](https://www.daf.qld.gov.au/contact) to find out about the voluntary Swine Brucellosis Accreditation Scheme.