



Brucella canis Fact Sheet

Brucella canis is a bacteria that causes **canine brucellosis**. This disease is endemic in areas with large populations of stray, sexually intact dogs.



Transmission

This bacteria is spread through **direct contact with infected bodily fluids** like vaginal discharge, semen, birthing fluids, urine, feces, blood, saliva, and nasal secretions. For dogs, this most often happens during breeding, during pregnancy, or ingestion of these fluids. For people, **transmission can occur if these materials contact the mouth, eyes, or scratches or wounds**.

Dog breeders, shelter, and veterinary staff face an **increased risk** due to exposure to canine bodily fluids.

Symptoms

Many dogs with *B. canis* are asymptomatic. Symptoms include:

- Reproductive abnormalities (abortion, stillbirth, infertility)
- Genital abnormalities (enlarged testicles or scrotum)
- Inflammation of the vertebrae (discospondylitis)
- Enlarged lymph nodes (lymphadenitis)
- Unexplained lameness or pain
- Reddening of the eye (uveitis)
- Lethargy
- Anorexia

High-Risk Dog Populations

From a population with a high number of stray dogs

New intake at a shelter of a mature, intact dog with no testing history

Dogs with known exposure to +*B. canis* dog

Periparturient dogs not tested prior to breeding

Sexually intact dogs

Dogs with symptoms that match canine brucellosis with no other explanation

How can I prevent dogs in my clinic from getting brucellosis?

Be aware of the symptoms of brucellosis. If you suspect brucellosis in a patient, isolate them from other dogs until test results are available. Practice good biosecurity and making sure to keep client animals separated, cleaning and disinfecting cages and equipment between patients, and/or using separate, unshared equipment on suspect animals.

How can I prevent veterinary staff from getting brucellosis?

If you suspect brucellosis in a patient, ensure you are wearing appropriate PPE when interacting with them and when disinfecting after them if it's suspected. *Brucella* is killed by most standard disinfectants.

How can I test a patient for canine brucellosis?

The testing process for canine brucellosis is serial, beginning with a screening test followed by confirmatory testing. Contact TDH and TDA for further instructions on testing.

Cases are classified as Suspect, Probable, or Confirmed. For the former two, isolation and retesting is recommended. For Confirmed cases, see below for management options.

What should I do if a dog at our facility tests positive (Confirmed)?

- Although not a reportable condition in Tennessee, **please notify the TN Department of Agriculture of any positive *B. canis* dog** if there are outbreak concerns or other livestock involvement.
- The current recommendation for a confirmed case of canine brucellosis is euthanasia.
- Brucellosis in dogs has no definitive treatment, can cause continued clinical symptoms, and poses a risk of disease to humans and other animals.
- The alternative to euthanasia is sterilization, lifelong antibiotic treatment, isolation in the home, and routine testing. This is not curative and can be challenging.
- The *B. canis* bacterium can survive in the environment for long periods of time, therefore, precautions should be taken to **properly decontaminate** an area with an infected dog.
 - Contaminated dust and dirt, water, feces, clothing, and other inanimate objects can pose transmission risk for a prolonged period.