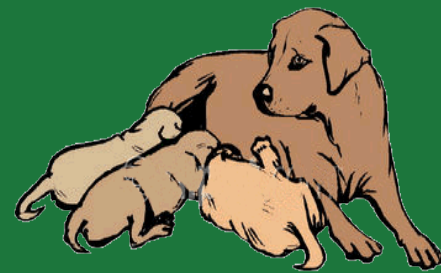




# *Brucella canis*: Guidance for Dog Breeders



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## **What is *Brucella canis*?**

*Brucella canis* is a bacteria that causes an illness called brucellosis. It primarily infects dogs, but has been documented to cause illness in humans and very rarely other wild canids (cat and dog type animals). There are other types of *Brucella* bacteria (*B. ovis*, *B. abortus*, *B. melitensis*) that can cause a variety of other diseases which are all generally referred to as brucellosis.

## **How do dogs get *Brucella canis*?**

Infected animals shed the bacteria in aborted materials (placenta / fetuses), vaginal discharge, semen, and seminal fluid. However, the *Brucella* bacteria can be shed throughout the life of an infected dog in their urine, blood, saliva, and more rarely in feces, nose, and eye secretions. Transmission usually occurs during breeding, whelping / abortion, and estrus via the mouth, nose, eyes, broken skin or in utero or nursing in puppies.

## **What are the signs of *Brucella canis* in dogs?**

Typically the only signs in dogs are reproductive:

- Abortion (3rd trimester) / stillbirth / poor doers
- Infertility
- Vaginal discharge (can last weeks)

Rarely the following signs can be exhibited:

- Scrotal swelling, edema, pain, and self mutilation
- Swelling of the internal male reproductive organs which can lead to difficulty urinating and defecating
- Lymph node swelling
- Testicle shrinkage and abnormal sperm
- Lethargy, fatigue, and exercise intolerance
- Inappetence and weight loss
- Lameness and pain from back bone infection
- Eye pain and internal inflammation

## **How is *Brucella canis* diagnosed in animals?**

This disease is very difficult to diagnose. Often all other tests will come back normal. The best diagnosis is to submit aborted placenta, tissue, and fluids to the lab to grow the bacteria. Blood tests can be used to determine if an animal has been infected with bacteria previously, but can take up to 4 months after infection to show up positive.

Unfortunately, animals shed the bacteria intermittently, so all breeding dogs should be tested a few weeks before any breeding activity.

## **How do you prevent *B. canis* in your kennel?**

- Test all dogs (male and female) and remove any positives.
- For all new additions, isolate and test upon arrival and 1 month later before allowing them into your shared kennel spaces.
- If the above measures are not followed, test all dogs a few weeks before each breeding.
- Practice strict biosecurity and disease monitoring.
- Clean and disinfect on a daily basis, especially whelping and nursery sites.
- Isolate all whelping females and maintain this separation if any signs of disease are noted.

## **Can people get *Brucella canis*?**

Yes. Although the risk is low, humans exposed to whelping / aborting dogs should wear protective gloves and clothing. Interacting with infected dogs at other times is considered very low risk, but transmission is not impossible. People who are immunocompromised are at increased risk from severe infection.

## **What are the symptoms of *B. canis* in people?**

Extremely variable and often not specific:

- Fever (periodic and at night)
- Fatigue and weakness
- Chills and sweats
- Headaches
- Weight loss

In some cases, the disease can become severe and cause infection and problems in the joints, heart, spine, lungs, mouth, spleen, liver, and brain.

## **How can breeders protect themselves?**

Wear gloves any time you are assisting with whelping, especially in the case of stillbirths and abortions. Use masks and goggles when cleaning and disinfecting infected or isolation areas.

## **What do I do if I suspect that I or one of my workers has brucellosis?**

Anyone showing symptoms of brucellosis should see a doctor. Visit [ualhd.org](http://ualhd.org) to find your local health department for more information.