# **Canine brucellosis:**

# A quick guide to this dangerous disease

#### What is canine brucellosis?

Canine brucellosis is a very contagious disease of the reproductive system caused by the bacterium, *Brucella canis (B. canis*).

## How is brucellosis transmitted?

Canine brucellosis spreads through bodily fluids such as vaginal secretions, semen, saliva, blood, urine, and feces. It spreads through contaminated equipment, or through inhalation of aerosolized bacteria. Puppies can be infected while in utero, during birth, or while nursing.

Brucellosis is often introduced into a kennel via new untested breeding dogs.

## What are the signs of brucellosis?

Common signs of brucellosis include:

- Reproductive failures (including infertility, stillbirths, and spontaneous abortions)
- Neonatal puppies who fail to thrive
- Vaginal discharge
- Testicular atrophy (shrinking)
- General signs such as fever, weight loss, and lethargy

Some dogs may be asymptomatic. These dogs can still be infectious.

# Is there a test for canine brucellosis?

There are two common screening tests for canine brucellosis: the rapid slide agglutination test (RSAT) and the tube agglutination test (TAT). A negative result is a good indicator that your dog does not have *B. canis*. However, agglutination tests have a high rate of false positives. Serial testing to confirm infection is recommended.

Following a positive agglutination test, your veterinarian may recommend an AGID (agar gel immunodiffusion) test to confirm results. Your veterinarian can help you with submitting blood samples for tests.

#### What is the treatment for brucellosis?

The most common treatment for brucellosis is antibiotics. Unfortunately, the success rate of treatment is very low. Dogs with brucellosis are generally infected for life.







What should I do if my dog tests positive for brucellosis? You may need to do additional testing to confirm infection.

Unfortunately, dogs with brucellosis are considered infectious for life. A dog may respond well to antibiotics, but should still be removed from a breeding program and separated from other dogs. Dogs that are spayed and neutered may shed less virus, so any positive dogs should be sterilized if possible. Rehoming of these dogs presents some risks to humans and other animals.

If one dog in your program tests positive for brucellosis, you should test ALL dogs in your kennel.

Some dogs with brucellosis may need to be euthanized.

## Why is brucellosis a serious concern?

Brucellosis is a serious disease. It is also zoonotic, meaning it can spread to humans. Brucellosis can lead to reproductive failure and neonatal deaths. Brucellosis can quickly shut down an entire breeding program and may lead to euthanasia of dogs.

Remember to practice good biosecurity to prevent the spread of disease. This includes sanitizing examination areas and surfaces, hand washing or wearing gloves, clean clothes, and foot covers.

#### How do I prevent brucellosis in my kennel?

- Remove any dog with brucellosis from your breeding kennel.
- Quarantine any new dogs entering your breeding program for two months.
- Test new dogs for *B. canis* before introducing them to the rest of your breeding population.
- Test ALL breeding dogs in your program every six months or before breeding.
- Follow guidelines for cleaning and disinfecting your kennel (see our handout Managing Germs in the Kennel Environment).

#### Am I at risk if my dog is infected with brucella?

Yes, it is possible that you can get infected with *B. canis*. Brucellosis can be especially dangerous for immunocompromised individuals.

#### Additional resources:

aphis.usda.gov/animal\_welfare/downloads/CanineBrucellosisBro-finalfp.pdf dvm360.com/view/canine-brucellosis-proceedings vcahospitals.com/know-your-pet/canine-brucellosis