

# Canine Brucellosis

*Do we still need to worry about it?*

Short answer: **YES!**

Long answer:

Canine Brucellosis is the disease caused by the *Brucella canis* bacteria. It has been a “back-burner” kind of disease for a while, and some breeders have grown complacent about testing after decades of not hearing about any cases, anywhere. A few breeders actually believe this disease has been eliminated from our dog population.

But bad news, folks! Not only is Brucellosis still with us, it is actually on the rise due in large part to the importation and distribution of affected, carrier and untested dogs into the United States and by our lackadaisical attitude about testing. According to Dr. Margaret Kooda, STCA member, Scottie breeder and veterinarian specializing in reproduction in Idaho Fall, Idaho, Brucellosis is spreading across the United States, and every state has reported cases. Brucellosis is a reportable disease to state veterinarians, so it can be managed and tracked after a reported case. But by the time dogs are diagnosed with this disease, it might be too late for your kennels and your dogs.

What is the big deal about Brucellosis? Plenty!

**EASE OF INFECTION:** Brucellosis can be transmitted sexually during natural service, but also when artificial methods are used with fresh, chilled or frozen semen. Dogs can also contract Brucellosis by doing what dogs do best: sniffing, licking, and eating gross things. If your dog comes in contact with saliva, vaginal discharge, urine, feces, aborted fetuses, milk, placentas, or semen from affected and/or carrier dogs, there is a very real chance that they will also become infected. Dr. Kooda adds that this disease can be aerosolized while cleaning, and carried on shoes, kennels, bowls. The bacteria can survive in the environment for months when the conditions are right. At highest risk for infection are stray dogs, dogs in groups and kennels, and dogs in your breeding program exposed and/or bred to a newly arrived, affected dog or bitch. Dogs can be exposed at dog shows or trials, at dog parks, or just walking down the street sniffing where another, infected dog has urinated.

**A BAD DISEASE:** Affected bitches will have a variety of symptoms including infertility, resorption, abortion between the 45<sup>th</sup> and 59<sup>th</sup> day of gestation, and/or fading neonatal puppies. Males may experience swollen, painful testicles, poor semen quality and failure to settle bitches. Spinal disease, eye disorders, kidney disease, multiple joint arthritis and nervous system signs can also occur. However, it is also possible for dogs to be infected and be actively shedding the bacteria ***without any obvious signs of disease.***

**YOU CAN CATCH IT TOO:** Dr. Marty Greer, veterinarian, reproduction specialist, and attorney in Brownsville, Wisconsin, writes the following for the AKC: “Canine brucellosis is a zoonotic disease. This means the disease can be spread to humans and is known as undulant fever. Once in the human, the disease may never be eliminated – it hangs out in the bone marrow of the unfortunate recipient[s] for the rest of their lives, causing waxing and waning symptoms that include fever, aches, and symptoms similar to that of influenza. It is of particular concern in the very young, the very old, patients who are immunocompromised such as patients on chemotherapy, steroids, other immunosuppressive drugs, and patients with diseases such as the human AIDS virus. Women who are pregnant can lose a pregnancy – and when you consider most caretakers of dogs in shelters, humane societies, rescue organizations, dog breeding kennels are young females of child-bearing age, this is especially worrisome.”

**HARD TO TREAT:** Brucellosis is not an easy disease to treat. Any dog that tests positive must be spayed/ neutered and isolated from all the other dogs in the kennel for the rest of its lifetime. There are drugs that can be tried, but treatment may take several years to be effective, if at all, and persistently positive dogs must be euthanized.

**THE BEST DEFENSE IS TESTING:** Who should be tested? According to Dr. Kooda, bitches should be tested every 6 months while actively breeding. Stud dogs also should be tested twice a year in a closed kennel situation. Dogs should be tested within one month of being collected for the shipment of chilled semen or before breeding outside females. And they should be tested **every time** before frozen semen is processed. All non-breeding dogs in a kennel should be tested yearly. Any newly arrived dog should be tested, quarantined, and retested in one month. And finally, any dog having suspicious symptoms or infertility issues should be tested.

In the US, there are both screening tests and confirmatory tests. The first test to run is the screening RSAT (rapid slide agglutination test). This is a very sensitive test, and you can trust a negative result. However, there can be false positives. If you get a positive result on the screening test, then you have to run the more specific lab test to confirm the result. These tests take time, and many people wait until their bitch is in season to test. The screening test takes 2 to 3 days to get results, and the confirmatory test takes a lot longer. If you are planning to breed your bitch, have her tested well in advance of taking her to the male, and make sure you show the stud dog owner the test results.

According to Dr. Greer, if you get a positive on the second, confirmatory test, be prepared to hear from your state veterinarian. "Dogs that are found to have serial positive test results are usually euthanized. This decision is made at the local level, by the state Veterinarian where the dog(s) are housed. In most states, this is a reportable disease – this means if your veterinarian finds your dog to have a positive brucellosis test result on a confirmatory test, your veterinarian is required to contact your State Veterinarian. In most states, there are written requirements for how individual and groups of affected dogs need to be managed. You don't get to decide – it is in the hands of the authorities. Spaying and neutering along with long-term use of antibiotics are not 100% effective in managing this nasty bacterial infection. For this reason, euthanasia of all persistently infected dogs is frequently the outcome."

**BOTTOM LINE: Yes! We still need to worry about Brucellosis. All breeders need to take this seriously. There is no vaccine, and there is no realistic cure. You can avoid it by testing. Protect your dogs, your kennels, and your family from this disease. You do not want it!**

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*This article first appeared in the STCA Health Trust Fund's newsletter, **The Scottie Guardian**, Vol.1, #4.*