



Frequently Asked Questions About Canine Brucellosis



Christine B. Navarre, DVM

What is Canine Brucellosis?

Canine Brucellosis is a bacterial disease caused mainly by *Brucella canis*, although *Brucella* from other animal species (livestock) can sometimes infect dogs.

How do dogs get infected with *Brucella canis*?

Brucellosis is a disease of the reproductive system and is spread most commonly by contact with infected reproductive tissues and secretions. Ways in which it can be spread include:

- Contact with the fetus or fetal fluids and membranes following abortions.
- Exposure to infected secretions during mating.
- Exposure to infected urine, saliva, nasal and ocular secretions, and feces.

What clinical signs do infected dogs show?

Clinical signs can be mild or severe, and some dogs show no signs at all. Both male and female dogs can be lethargic and depressed and have swollen lymph nodes. Occasionally infection occurs in the bones, joints and eyes; but signs involving the reproductive system are most common.

Signs in Females:

- Infertility
- Abortions and stillbirths
- Vaginal discharge

Signs in Males:

- Infertility
- Swollen or shrunken testicles
- Swollen prostate and epididymis

Can people get brucellosis from dogs?

Yes, brucellosis is a zoonotic disease that can be transmitted to people. However, *Brucella canis* is not as likely to infect people as some other *Brucella* species. Dog breeders are at higher risk because the bacteria are most likely shed during mating or birthing. Immunocompromised people (from disease or immunosuppressive therapy), young children and pregnant women are also at higher risk than the general population.

How is canine brucellosis diagnosed

Any dog suspected to have brucellosis should be immediately examined by veterinarian. Blood tests and cultures will be necessary to confirm a diagnosis.

Can canine brucellosis be treated?

Treatment options should be discussed with a veterinarian. Because it is very difficult to completely cure canine brucellosis and because it is contagious to people, euthanasia is usually recommended. Spaying or neutering followed by a long course of antibiotics is an option, but relapses are common. Some states have regulations that stipulate how infected dogs must be treated.

What preventive measures will keep dogs from getting infected with canine brucellosis?

All breeding males and females should be examined and tested for brucellosis by a veterinarian prior to mating. Positive animals should never be used for breeding. Other preventive measures that are especially important for breeding kennels include:

- Purchase breeding dogs only from known brucellosis-free kennels.
- New additions to the kennel should be isolated and have two negative tests 4-6 weeks apart before joining the rest of the kennel.
 - Dogs that remain at the kennel should be retested yearly.
 - Dogs that are used for outside breeding should be tested 2-4 times per year.
 - A quarantine plan should also be discussed with a veterinarian.
 - Females should be tested 3 weeks prior to the onset of heat.

What preventive measures will keep people from getting infected with canine brucellosis?

Latex or rubber disposable gloves should be worn to prevent contact with reproductive secretions during mating and with tissues and fluids following an abortion. In addition, masks and eye protection should be worn when cleaning kennels to prevent splashed or aerosolized water from getting in the eyes, nose or mouth. Avoiding touching one's face and eyes and washing hands after all procedures involving animals can prevent many exposures.

How can brucellosis be eradicated from an infected kennel?

Work with a veterinarian to develop a plan and determine what state regulations may be in place. An eradication plan will involve the following:

- Testing to identify and eliminate infected adult dogs.
- Identification and elimination of infected puppies born to infected dogs.
- Continued testing at 4 week intervals until all dogs have tested negative on at least two consecutive tests.

Authors

Christine Navarre, DVM,
School of Animal Sciences
Louisiana State University Agricultural Center

Diana Coulon, DVM
LSU AgCenter Biotechnology Laboratory

July 2017

