

## Canine Brucellosis

### *Brucella canis*

#### What is canine brucellosis and what causes it?

Canine brucellosis is an important cause of reproductive failure in dogs, particularly in kennels. Canine brucellosis is caused by the bacteria *Brucella* (bru-CELL-a) **canis**. Dogs and humans can be affected. Canine brucellosis occurs in a number of countries worldwide.

#### What animals get canine brucellosis?

Dogs are the primary animal species that can be infected with *Brucella canis*. However, other animals can be infected experimentally.

#### How can my dog get canine brucellosis?

In dogs, brucellosis is usually spread through contact with infected birthing tissues and fluids (e.g., placenta, aborted fetuses, fetal fluids, vaginal discharges). Canine brucellosis can also be transmitted by contaminated objects (**fomites**) such as, bedding, equipment, clothing, or shoes. The bacteria can also be found in the milk, blood, and semen of infected dogs.

Entry of the bacteria can occur by **ingestion** or **direct contact** with mucous membranes (eyes, nose, mouth), or breaks in the skin.

#### How does canine brucellosis affect my dog?

*Brucella canis* causes reproductive problems (e.g. abortions, stillbirth, infertility) in dogs. Other signs can include inflammation of lymph nodes, behavioral abnormalities, lethargy, and weight loss.

#### Can I get canine brucellosis?

Yes. However, human infections with *Brucella canis* are rare. **Direct contact** or **aerosol** exposure to infected animal fluids is the primary way people are infected with canine brucellosis. People can also become infected by **ingesting** the bacteria or by contamination of mucous membranes and breaks in the skin.

Infection with *Brucella canis* seems to require close contact with infected dogs or contact with bacterial cultures. People who work with dogs in a breeding situation (e.g., breeders, kennel workers, veterinarians) may be at higher risk of exposure.

Infection in people causes flu-like signs (fever, night sweats, headaches, back pain). Arthritis (joint pain) and re-occurring fevers may occur with long term infection. Rarely, cases of brucellosis can involve the nervous system, eyes, or heart.

#### Who should I contact, if I suspect canine brucellosis?

**In Dogs** – Contact your veterinarian immediately.

**In Humans** – Contact your physician immediately

#### How can I protect my animals from canine brucellosis?

*Brucella canis* can survive for months in the environment under optimum conditions but can be destroyed by heat and some disinfectants. Thoroughly clean and disinfect areas exposed to infected dogs, their urine, blood, milk, or discharges. Keep sick dogs away from other dogs to avoid spreading the disease. Carefully screen dogs that are being introduced into a breeding program to control transmission.

#### How can I protect myself from canine brucellosis?

Wear protective clothing (gloves, masks) when handling reproductive tissues (assisting delivery of newborn puppies). Always wash your hands after touching animals.

#### For More Information

CFSPH Technical Fact Sheets. *Brucella canis* at <http://www.cfsph.iastate.edu/DiseaseInfo/>

CDC website. Brucellosis at [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis\\_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm)



**Canine Brucellosis**  
is an important cause  
of reproductive failure  
in dogs.

Photo from Claudia Baldwin, Iowa State University, College of Veterinary Medicine