

Canine Brucellosis: Infection Prevention Info for Veterinary Personnel

What is canine brucellosis?

Canine brucellosis is a zoonotic disease found in dogs and caused by the bacterium *Brucella canis*.

How is brucellosis spread?

Brucellosis can be spread by direct or indirect contact with vaginal discharges, semen, birth products (fetus, placenta, fetal fluids), and urine. Low concentrations of bacteria have been detected in saliva, nasal and ocular secretions, and feces.

What personal protective equipment precautions should your staff take?

Personal protective equipment (PPE) should be worn by all staff handling a positive or high-risk dog or cleaning and disinfecting a contaminated area. Gloves should be worn routinely when contact with bodily fluids is likely, when handling diagnostic specimens (e.g., blood, urine), when performing an exam on a positive or high-risk patient, and when cleaning and disinfecting.

Gloves, N-95 respirator, eye protection, waterproof gown/coveralls and shoe covers should be worn for surgeries, aerosol generating and obstetric procedures.

Separation of patients

If possible, dogs and their owners should be brought into the facility through a separate entrance to prevent contact with other patients.

While at the clinic, dogs should use a separate elimination area in a sunny, dry place away from other patients. Clients should stay in the dedicated exam room and not be allowed to wander through other areas of the clinic.

If a dog requires hospitalization, it should be kept in an isolation area away from other patients.

Hand hygiene

Thorough hand washing with soap and water should be performed at key times including, but not limited, to:

- After removal of PPE
- After leaving a contaminated area
- After cleaning and disinfection

Cleaning and disinfection

B. canis is stable in the environment in the presence of organic debris for up to 2 months and can withstand drying, freezing, water, dust, and soil in these conditions. It is however, readily inactivated by commonly used disinfectants and sunlight.

Proper cleaning and disinfection procedures are essential to prevent transmission of *B. canis* within the clinic to other patients and staff. Some important reminders:

- Clean and disinfect all surfaces, paying special attention to hand contact areas (light switches, faucet, and drawer handles, etc.), patient contact areas (exam table, floor, etc.), and equipment used during exam and procedures (stethoscope, thermometer, etc.).
- Clean by removing organic material prior to using a disinfectant.
- After cleaning, thoroughly spray area with disinfectant, ensuring that it stays wet for the entire contact time (read the disinfectant label for appropriate contact time).
- After the allotted contact time, wipe area with paper towels and allow to dry.
- If the surface is still dirty, repeat the cleaning and disinfection process until visibly clean.
- Wear gloves with appropriate additional PPE during cleaning and disinfection. If using a hose to spray a bigger area, use an N-95 respirator and eye protection.

What is the guidance for seeing other dogs that have lived in a household with an infected dog?

Other dogs in the household should be handled with the same precautions as the infected patient.

- The risk for transmission is highest for sexually intact male and female dogs living in a household with a dog infected with canine brucellosis.
- Spayed and neutered dogs living in the home with an infected dog, although lower risk, are still capable of contracting *B. canis* and shedding the organism, particularly in urine.

Deceased body care

Deceased positive or high-risk patients should be double bagged with absorbent pads placed around the body to prevent any leakage of bodily fluids during transportation or disposal.

Gloves, disposable waterproof gown/coveralls, N95 respirator and eye protection should be worn during euthanasia and when handling a deceased patient. For larger patients cared for on the floor, shoe covers should also be worn.

Pregnant staff

Staff or volunteers who are pregnant should not handle positive or high-risk patients, or clean and disinfect contaminated areas. If this is unavoidable, PPE should be worn including gloves, N95 respirator, eye protection and waterproof gown/coverall. A healthcare provider should be consulted for any potential exposure concerns.

Exposure to an infectious patient without having used appropriate PPE

Any staff who handled a positive patient or cleaned and disinfected contaminated areas without appropriate PPE should call MDH at 651-201-5414 for further exposure evaluation. Antibiotic prophylaxis may be recommended for staff considered exposed.

*Minnesota Department of Health
Zoonotic Diseases Unit
PO Box 64975
St. Paul, MN 55164-0975
www.health.state.mn.us*

08/08/2023

To obtain this information in a different format, call: 651-201-5414. Printed on recycled paper.