



## Canine Brucellosis: Important information for dog auction participants

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The Wisconsin Division of Public Health, the Wisconsin Division of Animal Health, and the Wisconsin Veterinary Diagnostic Laboratory want to alert auction participants that two dogs purchased at a dog auction this Spring were diagnosed with a disease called **canine brucellosis**. This infection poses a risk to both animal and human health, and is commonly found in kennel operations.

### **Brucellosis in Dogs**

Canine brucellosis is a disease caused by a bacterium called *Brucella canis* which can be spread from dog to dog, most often during breeding and whelping, although transmission can also occur by contact with urine and estrus discharge of females in heat. The most common problem that brucellosis causes in dogs is infertility and other reproductive problems such as abortions. The infection may also cause lethargy, spinal problems, and eye inflammation in dogs.

Treatment of brucellosis is difficult and often unsuccessful. Once it becomes established in a breeding kennel it can be hard and costly to eradicate, since elimination involves multiple rounds of testing and culling of infected dogs.

### **Human Health Risk**

Another important reason for concern is that the *Brucella canis* bacteria can be transmitted to humans. Although infection in humans is not common, it can be serious and may often go unrecognized because it is quite difficult to diagnose. Persons who get infected can develop fevers, enlarged liver, infection of the bones, lung disease, inflammation of the heart and heart valve problems.

Immune compromised persons have a higher risk of becoming seriously ill if infected. (Immune compromised persons include those undergoing chemotherapy, transplant procedures, or corticosteroid therapy, as well as persons who have AIDS, diabetes, leukemia, or other conditions which can cause a deficiency in the immune system.)

Because brucellosis in dogs primarily affects the reproductive organs, spayed females are thought to carry little risk to owners. However, neutered males still pose a human health risk because the infection persists indefinitely in the prostate, and the *Brucella* bacteria can still be present in the urine of infected males, even after castration.

## **What You Can Do**

In order to minimize the risk of infection for your household and kennel, as well as for purchasers of any dogs you sell, the following measures are recommended:

- ✓ Consider only purchasing dogs that have had a negative *Brucella* test from a reliable lab. Be aware that certain tests can be unreliable (see below).
- ✓ Test all newly purchased dogs before you introduce them into your kennel or before they are sold to the public.  
There are two general types of tests – one that detects antibodies to the *Brucella* bacterium, the other that detects the bacterium itself. Both tests should be submitted through your veterinarian. The antibody tests, especially one called the “card test”, can sometimes produce falsely positive and, less commonly, falsely negative results. Most reliable labs will run an additional antibody test to confirm the results of a card test. The culture test which detects the actual bacteria is not subject to falsely positive results.
- ✓ Consult with your veterinarian about testing your existing dogs and how to eliminate the infection in your facility.
- ✓ If you or your kennel staff suspect that they have symptoms of brucellosis, check with a doctor and be sure to mention the long-term and intense exposure to dogs. Early symptoms in humans are typically prolonged fever, especially accompanied by enlarged lymph nodes, sweats, body aches, and backache. Unlike dogs, infected humans usually respond well to treatment with appropriate antibiotics.

Questions about the health of your dogs are best answered by your veterinarian. Consult a physician about any suspected human illness. This informational alert was developed by:

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