

## **Brucellosis Testing in a Windsprite Breeding Program International Windsprite Club**

Brucellosis is caused by the bacterium *Brucella canis* and is a serious illness in both dogs and humans. The International Windsprite Club Breeder Code of Ethics includes a commitment to conduct recurring completion of brucellosis testing within 6 months prior to breeding.

### **Why is Brucellosis Testing Important?**

- Brucellosis is transmittable from dogs to humans, and it can cause significant illness in people. It is a serious public health concern.
- Brucellosis easily spreads between dogs via venereal contact, as well as contact with various bodily fluids.
- Brucellosis causes canine infertility and illness. The reproductive organs become inflamed, which can result in abortion, early fetal death & absorption, scarring of fallopian tubes, poor sperm quality, and prostatic disease. Lymphadenitis, discospondylitis, uveitis, and waxing & waning malaise can also occur.
- A dog infected with brucellosis cannot be cured of the disease, only treated and managed throughout a dog's lifetime. Because of the risk to humans, euthanasia is often recommended for brucellosis positive dogs.

In accordance with the American College of Theriogenologists (ACT) and the Society for Theriogenology (SFT) all dogs intended for breeding (via live cover or using assisted reproduction techniques) should have a negative screening test either at the time of breeding or every six months. They also recommend that all imported dogs be negative for brucellosis. Brucellosis testing should be performed by a veterinarian's office or a clinical laboratory. Any positive test warrants additional confirmatory testing to ensure it is not a false positive. Any dog diagnosed with brucellosis by a veterinarian should be immediately removed from a breeding program and isolated from other dogs.

### **References**

1. Kazmierczak J, ed. Public Health Implications of *Brucella canis* Infections in Humans. National Association of State Public Health Veterinarians. Published March 2012. <https://www.nasphv.org/Documents/BrucellaCanisInHumans.pdf>
2. Thomason S. Diagnostic Options for Canine Brucellosis. Kansas State Veterinary Diagnostic Laboratory. Published September 2019. [https://ksvdl.org/resources/news/diagnostic\\_insights/september2019/diagnostic-options-canine-brucellosis.html](https://ksvdl.org/resources/news/diagnostic_insights/september2019/diagnostic-options-canine-brucellosis.html)
3. Cosford KL. *Brucella canis*: An update on research and clinical management. *PubMed*. 2018;59(1):74-81. <https://pubmed.ncbi.nlm.nih.gov/29302106/>
4. Hensel ME, Negron M, Arenas-Gamboa AM. Brucellosis in dogs and public health risk. *Emerging Infectious Diseases*. 2018;24(8):1401-1406. doi:10.3201/eid2408.171171

5. The American College of Theriogenologists and Society for Theriogenology. Position statement: Welfare of breeding dogs. *clinicaltheriogenology.net*. March 2012. doi:10.58292/CT.v4.11248
6. Eason M, Stull J. Canine Brucellosis Information for Dog Owners. American Kennel Club Canine Health Foundation. Published March 2019. <https://www.akcchf.org/canine-health/top-health-concerns/current-topics-in-infectious-disease/AKC-CHF-Canine-Brucellosis-Fact-Sheet.pdf>
7. Santos RL, Souza TD, Mol JPS, Eckstein C, Paixão TA. Canine Brucellosis: an update. *Frontiers in Veterinary Science*. 2021;8. doi:10.3389/fvets.2021.594291
8. Brooks W. Brucellosis in Dogs. Veterinary Information Network. <https://veterinarianpartner.vin.com/default.aspx?pid=19239&id=4952554>. March 2024.
9. Hensel ME, Negron M, Arenas-Gamboa AM. Brucellosis in Dogs and Public Health Risk. *Emerg Infect Dis*. 2018;24(8):1401-1406. doi:10.3201/eid2408.171171
10. Graham LT, Vitale SN, Foss KD, Hague DW, Anderson KM, Maddox CW. Canine brucellosis in three littermates, case report. *Frontiers in Veterinary Science*. 2022;9. doi:10.3389/fvets.2022.958390
11. Spickler, A. www.cfsph.iastate.edu. *Brucellosis: Brucella Canis Contagious Abortion, Undulant Fever*; May 2023. [https://www.cfsph.iastate.edu/Factsheets/pdfs/brucellosis\\_canis.pdf](https://www.cfsph.iastate.edu/Factsheets/pdfs/brucellosis_canis.pdf).
12. Wanke MM \*. *Canine Brucellosis*. Vol 82-83.; 2004:195-207. doi:10.1016/j.anireprosci.2004.05.005
13. Pinn-Woodcock T, Frye E, Guarino C, et al. A one-health review on brucellosis in the United States. *Journal of the American Veterinary Medical Association*. 2023;261(4):451-462. doi:10.2460/javma.23.01.0033