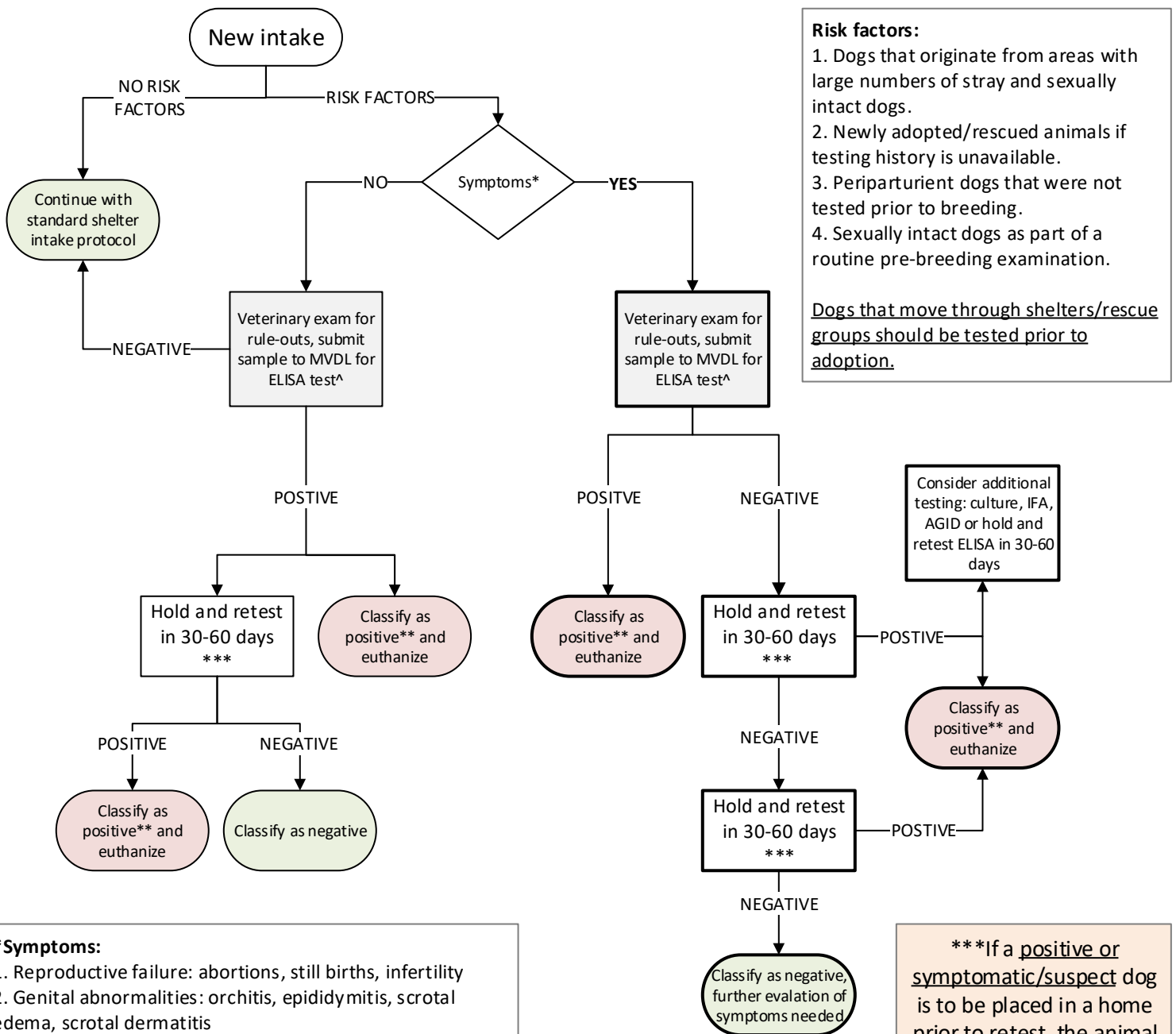




# Brucella canis Surveillance for Veterinarians/Animal Shelters

Last updated December 2022



**Risk factors:**

1. Dogs that originate from areas with large numbers of stray and sexually intact dogs.
2. Newly adopted/rescued animals if testing history is unavailable.
3. Periparturient dogs that were not tested prior to breeding.
4. Sexually intact dogs as part of a routine pre-breeding examination.

Dogs that move through shelters/rescue groups should be tested prior to adoption.

**\*Symptoms:**

1. Reproductive failure: abortions, still births, infertility
2. Genital abnormalities: orchitis, epididymitis, scrotal edema, scrotal dermatitis
3. Lymphadenitis
4. Discospondylitis
5. Uveitis
6. Generalized pain, unexplained lameness/back pain

Veterinary evaluation should be done to rule out other potential causes of symptoms.

**\*\*\*If a positive or symptomatic/suspect dog is to be placed in a home prior to retest, the animal is to be adopted under quarantine with MDOL disclosure form signed by the owner. Retest required in 30-60 days.**

A symptomatic animal that is ELISA negative may be a chronically infected animal. Infected animals may fluctuate between serologically positive and negative, therefore recommend retesting ELISA after 30-60 days or consider additional testing: culture, IFA, or AGID.

- ELISA negative on retest after 30-60 days is considered negative if animal is asymptomatic.
- ELISA negative on 2nd retest considered negative after if animal is symptomatic.
- An asymptomatic animal that is ELISA positive on retest after 30-60 days is considered positive.



# Brucella canis ELISA Test Interpretation for Veterinarians

Last updated December 2022

### When to test for B. canis:

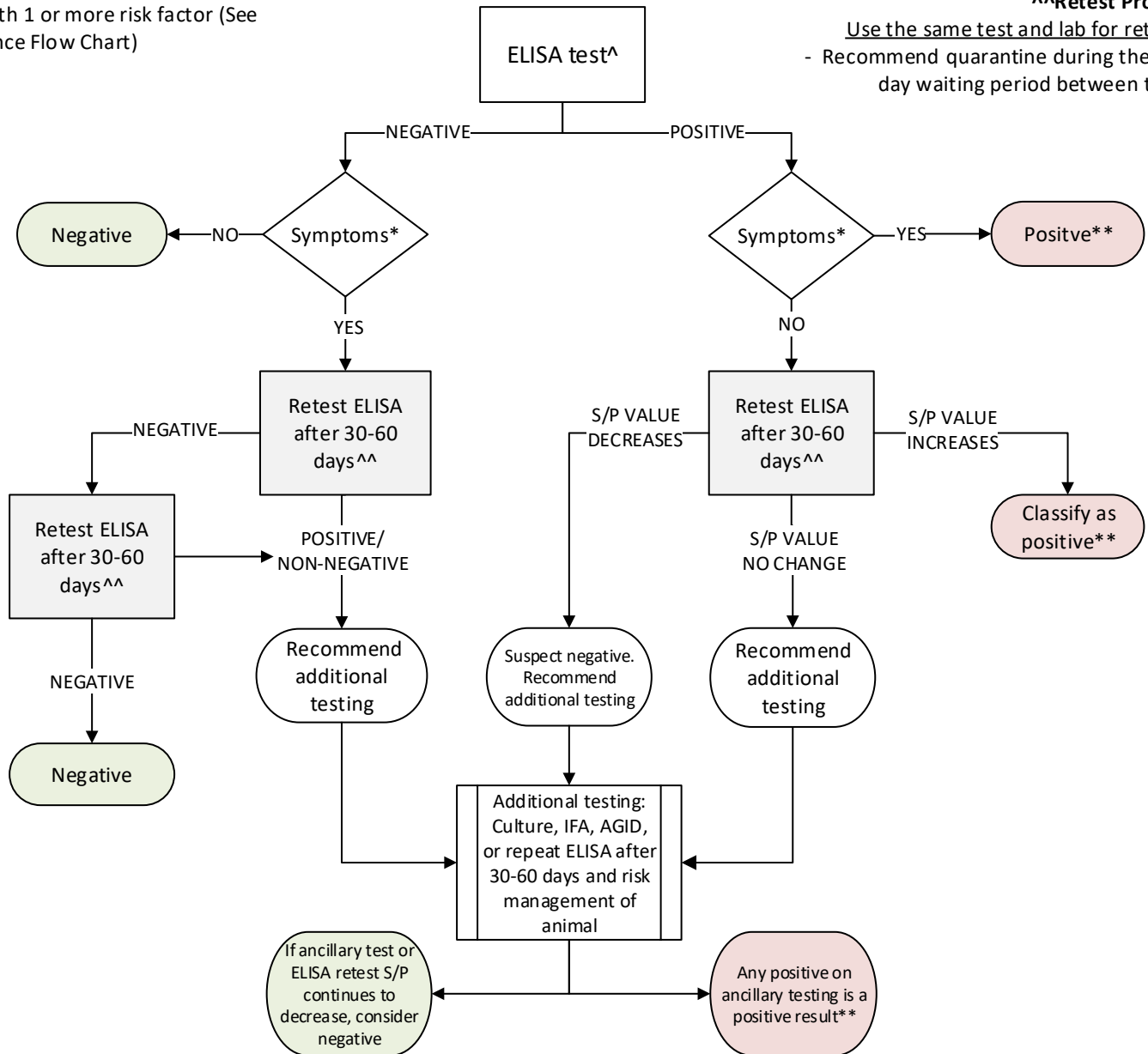
- Dogs with *B. canis* symptoms when an alternative diagnosis cannot be determined.
- Dogs with 1 or more risk factor (See Surveillance Flow Chart)

### ^How to test for B. canis:

- ELISA = primary screening test
- Submit serum to Montana Veterinary Diagnostic Laboratory, test listed under *B. ovis* ELISA

### ^^Retest Protocol:

- Use the same test and lab for retesting
- Recommend quarantine during the 30-60 day waiting period between testing



**\*\*Positive animal management:**  
Euthanasia recommended  
 Alternatively, a lifelong quarantine, treatment with antibiotics, retest and disclosure of diagnosis to adopters/owners.

### S/P value

1. Sample/Positive value = comparison of how closely related the sample is to a known positive
2. S/P > 3 is highly suspicious for infection; however, lower positive S/P values can also indicate infection
  - Additional testing may be necessary for definitive diagnosis: Culture, IFA, AGID; call Montana Veterinary Diagnostic Lab for information.
3. > 0.8 S/P is considered positive result; however, each case must be interpreted with individual context due to possible exposure titers
  - When unclear, consider any positive result as active infection, quarantine, and retest with ELISA after 30-60 days or advise ancillary testing.