

Brucella canis Protocol

Do you have a dog from abroad? Or are you considering rescuing a dog from abroad?

Rescuing a dog is a lovely thing to do, but with so many animals needing homes it is important to know all the facts to allow you to keep your new dog, you, your family, veterinary staff and the wider community's dogs safe.

Rescuing dogs from abroad has increased by 50% in the last few years. Unfortunately, due to such issues as illegal imports, puppy farms, inappropriate education and falsification of documents, the correct disease prevention checks are not always completed.

Puppies or adult dogs entering the country may well be carrying exotic diseases or parasitic infections which show no clinical signs upon arrival. Routine screening of these dogs is recommended.

Possible diseases your dog maybe carrying:

- Leishmaniasis
- Babesiosis
- Brucella canis
- Ehrlichiosis
- Heartworm
- Lyme's disease
- Anaplasmosis
- Hepatozoon canis
- Rabies
- Tapeworm

These diseases are not endemic in the UK due to our climate, vaccination programmes and worming protocols; we want to try and keep it that way. Some of these diseases/parasites only affect the individual animal and some are transmitted to other dogs. Several of these diseases and parasites are also zoonotic, which means they can be passed on to humans.

Brucella Canis is a zoonotic disease and has recently been in the press due to cases being transmitted to humans. This leaflet aims to inform you of the steps we are taking at Belle Vue Vets to keep everyone safe.



Canine Brucellosis is an infectious disease caused by the bacteria *Brucella Canis (B.Canis)*. There is growing concern around this disease because of the large number of dogs imported from abroad, especially Romania, where *B.Canis* is endemic. There have been increasing numbers of imported dogs testing positive for the disease in recent years.

What are the clinical signs in the dog?

Many dogs may be carrying the infection **without** showing any signs, which poses a greater challenge as it is not known if the owner or veterinary team may be at risk of being infected. A range of clinical signs can be seen:

- Discospondylitis (neck or back pain)
- Abortion
- Uveitis (inflammation in the eye)
- Purulent preputial/vulval discharge
- Testicular/scrotal swelling

How is it transmitted?

Transmission to humans is most likely to occur through contact with infectious canine reproductive tissues and discharges. Contact with urine, faeces, or saliva from infected dogs may also pose a risk. Therefore, veterinary staff are at the greatest risk when an animal is sick and may have to be hospitalised.

What does the infection look like in humans?

Humans infected with *B. canis* may develop non-specific signs such as:

- Intermittent fever, fatigue, and lymphadenopathy (swollen lymph nodes).
- Arthralgia (discomfort, pain or inflammation arising from any part of a joint including cartilage, bone, ligaments, tendons or muscles) has been the most common reported symptom followed by pyrexia (fever), fatigue, hyperhidrosis (excessive sweating), hepatosplenomegaly (enlarged liver and spleen), inappetence and abortion.
- In children, significant respiratory disease and dyspnoea have been noted, while in adults, an association with Guillain Barré syndrome has also been reported.
- Thankfully, human case fatality proportion is very low; however, rare but severe complications of *B. canis* infection include the development of endocarditis and septic arthritis. The risk of endocarditis is probably around 2% of clinical cases but is responsible for 80% of the fatalities for brucellosis in general.



Due to the risks imposed on veterinary staff, Belle Vue Vets are now recommending testing to confirm your dog's Brucella status.

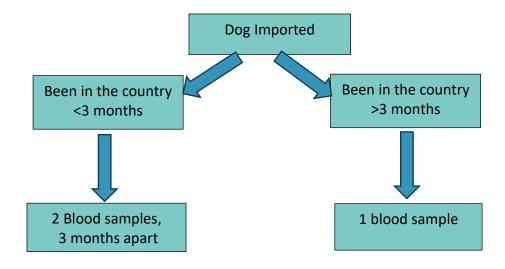
Recommended testing

It is recommended that testing is undertaken as soon as possible, whilst your animal is healthy. A blood sample will be taken from your dog and sent to an external laboratory for testing. Once we receive the results, we will inform you as soon as possible; this usually takes 7-14 days. Their Brucella status can then be updated on our database, and they can continue to have the full range of veterinary services on offer at Belle Vue Vets.

We will only accept blood results that have been undertaken in a UK laboratory.

2 types of tests will be performed on the blood to try and give us the most accurate results for your animal.

- If your dog has been in the country for greater than 3 months, then 1 blood sample is required.
- If your dog has been in the country for less than 3 months, then 2 blood samples will be required, 3 months apart.



What are the 2 types of tests?

SAT and iELISA blood tests both measure antibody levels (IgM & IgG). In combination these tests have a sensitivity of 92% and specificity of 99%. This is the 'gold standard' regime and is our recommendation, as well as that of the universities, referral centres and some animal associated businesses (behaviourists, dog kennels, hydrotherapists etc.) The cost of both of these blood tests is £40.



Frequently asked questions

What happens if my pet gets sick and I have not been able to get my dog's blood test taken, or the results are not back?

We can complete a snap test at the surgery, which only takes 10 minutes. It is not as accurate as the 2 external blood tests, but if negative it will enable us to go ahead with medical or surgical investigations if deemed necessary.

SNAP test – this also measures antibody but is less accurate: sensitivity is 72.7% and specificity is 90.7%

The cost of this test is £45 The cost of PPE per day is £25-£50 Grade 1 PPE: gloves and masks £25 Grade 2 PPE: gloves, masks, gowns, barrier nursing £50 The extra cost of hospitalisation for isolation and deep cleaning is £20 on top of normal hospitalisation fee.

What happens if I decline testing?

We will be unable to provide the same standard of treatment for an animal with an unknown *B. canis* status due to the risk imposed on our staff.

NO SURGICAL PROCEDURES WILL BE UNDERTAKEN AND MEDICAL TREATMENT MAYBE DECLINED

Dogs with unknown status that require hospitalisation may be declined for veterinary staff safety, but if deemed necessary then all staff will have to wear full **Personal Protective Equipment (PPE)** and barrier nurse the dog in an isolation ward to avoid any bodily fluid contamination for the safety of both our staff and other patients.

These extra measures will incur costs due to the extra work and equipment required to keep staff and other animals safe.

What if my dog gets a positive test result?

We would need to report this to the APHA (Animal and Plant Health Agency) as they collect the data necessary to create the most up-to-date guidance.

If you want any further information on *B.canis* or any of the other diseases mentioned above, then please contact the surgery on 016973 42174 where a consultation can be arranged with one of our vets.