



involved dogs imported from eastern Europe or offspring of imported dogs¹⁷, which was consistent with a recent study from continental Western Europe¹⁸.

Globally, *B. canis* has a wide distribution and is endemic in parts of North and South America, Asia, Africa, and eastern and central Europe¹⁹. In recent years, incidence has increased in Western Europe, attributed in part to increased movement from endemic regions^{20,21}. The UK has seen an increasing number of dogs being imported. From January 2019 through to December 2021, over 170,000 dogs were imported from the EU for the pet market (including adult rescue dogs)²².

Due to challenges identifying the symptoms and the lack of validated tests for humans, human cases are rarely reported, and are likely to be underreported globally²³. However, in 2022, there was a well-publicised case of human infection in the UK²⁴, which alongside increased incidence and awareness of the disease, led to heightened levels of concern within the veterinary profession. We are concerned about the suspected rise in cases of *B. canis* in the UK for 2024 and potential to 4 (it should be noted that increased levels of awareness and testing may be contributing to the overall increase in case numbers. This increase has arisen from a small baseline of known cases, and evidence of zoonotic transmission has so far been limited to very few cases. The [2023 UK Health Security Agency \(UKHSA\) Human Animal Infection Risk Surveillance group \(HAIRS\) Risk Assessment](#) showed the probability of infection to be very low for the general UK population, and low for individuals with greater risk of exposure to infectious material (eg dog breeders, kennel, veterinary and laboratory staff and 1 0 0 1 133ates of i.1ee9o0 g0 s fspriein tto0 g0 G -0.00288 Tc[3-9(ov)-3(er)]TJE7(wed.)-10(i)-60.00ET-560.

Sensitivity, specificity, and the Positive Predictive Value (PPV) should be considered when evaluating the overall performance of a diagnostic test and a particular result in an individual dog:

Diagnostic sensitivity: The proportion of *diseased animals* that can be expected to yield a positive test result (True positive). Tests with higher diagnostic sensitivity generate fewer false negatives and therefore greater confidence in negative results.

Diagnostic specificity: The proportion of *non-diseased animals* that can be expected to yield a negative test result (True negative). Tests with higher diagnostic specificity generate fewer false positives and therefore greater confidence in positive results.

Positive Predictive Value (PPV): The proportion of all *positive results* that can be expected to be from diseased rather than non-diseased animals. This proportion is influenced by pre-test probability as well as (predominately) specificity. Restated, it is the probability that a positive diagnostic test result is a true reflection of the presence of the disease being tested for that dog.

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Polymerase Chain
Reactions (PCR) *B. canis* DNA
in blood or
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Molecular biology

detail on the many challenges associated with determining whether a dog should be considered confirmed infected, a suspected case or uninfected.

Recommendation 3: In most cases, *B. canis* SAT and iELISA serological tests should be used to determine the infection status of a dog, using blood samples taken 3 months after potential infection. Serological tests alone should not be used to confirm infection, and results should be considered alongside additional evidence, such as clinical signs, movement history and likelihood of exposure to the infection. Veterinary professionals should refer to [APHA](#) for further guidance on testing.

Recommendation 4: When a dog with no clinical signs or history of direct exposure tests positive for *B. canis* by serological test, they should be isolated if pregnant or while in season,

Some veterinary practices have begun to implement blanket policies to routinely test imported dogs, limiting treatment to emergencies only until a negative test is shown. It is understandable that there are concerns about the potential risks to human and animal health and welfare, and veterinary teams have a right to consider and protect their own health and wellbeing, balancing this against the risk to animal welfare, especially where emergency care is involved. Whilst the disease remains reportable rather than notifiable, we support veterinary professionals being able to use their clinical judgement to

diagnostic imaging findings if in isolation), infertility, epididymitis/orchitis, abortion/stillbirth, transmissible venereal tumour (indicator of uncontrolled breeding abroad)

dogs imported from *B. canis* endemic countries – ideally, should be tested pre-travel (or at point of entry) by an approved laboratory and again after 3 months

dogs (male and female) intended for breeding – prior to first mating, and subsequent

potentially providing a false sense of security, but it is not illegal to attempt. Following a positive test, it is important for veterinary professionals to have a full conversation with clients in a public health context, and direct owners to APHA's [Brucella canis: Information for the public and dog owners](#) for more information.

There is no universally acknowledged best practice treatment regime. The APHA [Summary information sheet for veterinary staff](#) provides more detailed information and links to further resources on this topic, but in general, the following are

life is more important than quantity. The ethics of an infected dog potentially posing a risk to other dogs and humans should also be considered when discussing treatment options. The willingness of veterinary practitioners to see and treat dogs with suspected or confirmed cases of *B. canis* may also have an impact on the decision of owners with respect to euthanasia. Together, these issues can often mean that euthanasia is the best option for the dog's welfare, and to protect others. Owners of *B. canis* positive dogs should consult with their vet to help make this challenging decision.

Further research into diagnostic and treatment options for this disease are needed, to improve the evidence-base and options available for dogs testing positive. Employers and professional veterinary organisations also have a role to play in supporting veterinary professionals by providing information relating to *B. Canis* positive dogs. Clear advice for pet owners is also needed. The APHA guidance for [veterinary staff](#) and [members of the public](#) are useful starting points, as is the [BSAVA Scientific Information Document \(SID\)](#).

Recommendation 11: When deciding on suitable treatment or euthanasia options following confirmation of *B. canis* infection, cases should be individually risk assessed. Quality of life

