

IMPORTANT INFORMATION FOR BREEDERS AND OWNERS OF BORDER TERRIERS

SPONGIFORM- LEUCO-ENCEPHALO-MYELOPATHY

Spongiform Leuco-Encephalo-Myelopathy (SLEM), also known as Shaking Puppy Syndrome (SPS), is a rare neurological condition which has been recorded in Border Terriers worldwide. The name describes the changes in the brain and nerve sheaths of affected animals.

Affected puppies show signs at 2-3 weeks of age, the time at which they are attempting to stand. The condition is characterised by uncontrollable tremors, especially of the hindquarters but sometimes also involving the forequarters. These tremors vary in severity with the worst affected having great difficulty in standing. The tremors cease when the puppy is asleep. Very rarely signs may not develop until 8-12 weeks of age.

The majority of sufferers die or are euthanised, although, with a lot of effort, it is possible to rear some of those less severely affected. In those which survive mobility often improves with maturity although their gait will never be completely normal.

Research at the University of Missouri has confirmed that SLEM appears to be caused by a single autosomal recessive gene and in 2017 a DNA test was developed to identify those animals which carry the mutant gene.

In the UK the DNA test is offered by the Animal Health Trust and can be carried out on cheek swabs taken by an owner. For information or test kits email dnatesting@aht.org.uk

TEST RESULTS

Dogs may test as:

CLEAR. The animal does not possess the affected gene and therefore cannot pass it on to its offspring.

CARRIER. The animal has one normal copy of the gene and one defective one. These dogs are clinically normal but, on average, will pass the defective gene on to 50% of their offspring.

AFFECTED. The pup has inherited two defective copies of the gene, one from each parent, and will develop SLEM early in life.

The results for UK resident dogs which have been tested may be viewed on the Kennel Club website, connection available from the Breed Health Site www.borderterrierhealth.org.uk or direct to the KC website at <https://www.thekennelclub.org.uk/health/for-breeders/dna-screening-schemes-and-results/dna-screening-for-breeds-a-b/border-terrier-dna-screening/>

BREEDING ADVICE

Ideally all potential breeding stock should be tested prior to being bred from.

At a practical level, if one parent is known to be CLEAR no affected pups will be born but these pups should all be tested before being bred from.

CLEAR to CLEAR can only produce CLEAR. Pups from such a mating are described as hereditarily CLEAR.

CARRIERS can be bred from if they are otherwise animals of quality but they may only be mated to CLEARS and the resulting pups must be tested.

CARRIERS must never be mated to another CARRIER or to an animal of unknown status lest they produce affected pups. On average, taken over a number of matings, CARRIER to CARRIER will produce 25% CLEAR, 50% CARRIER and 25% AFFECTED.

Although the number of affected pups born has been relatively small, current test results suggest that up to 10% of Border Terriers in the UK are CARRIERS. The gene is thus widespread throughout the population and it would now be regarded as irresponsible to breed from untested stock.

For more detailed information on the condition please consult the Breed Health Site on www.borderterrierhealth.org.uk

BREED HEALTH SURVEY FORMS

These are available today and may also be downloaded from the Breed Health Group website at <https://borderterrierhealth.org.uk/index.html> and can also be completed on line from the home page or on this direct link <https://borderterrierhealth.org.uk/health-survey-form.html>

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