



## **media release**

Friday 16 January 2015

### **NEW DNA HEALTH TEST LAUNCHED FOR LABRADORS**

**Labrador owners will soon be able to screen for an inherited eye condition, macular corneal dystrophy (MCD), with a genetic test developed by the Kennel Club Genetics Centre at the Animal Health Trust**

The Animal Health Trust and the Kennel Club are pleased to announce a new DNA test for the genetic mutation causing macular corneal dystrophy (MCD) in Labradors will be available to order from the Animal Health Trust DNA Testing Service from Monday 26 January 2015.

Macular corneal dystrophy (MCD) is a hereditary eye disease and although it is a painless condition, it causes severe visual impairment in affected dogs. The test will cost £48, including VAT, and is a non-invasive way to screen for the mutation that causes this condition.

The mutation for MCD is recessive; meaning only dogs that inherit two copies of the mutation will be affected. Dogs identified by the test as Clear have no copies of the mutation whereas Carriers have one copy of the mutation. Clears and Carriers cannot develop MCD, although Carriers will pass the mutation on to about half of their puppies if they reproduce. Dogs identified as Genetically Affected have two copies of the mutation and will develop MCD around middle-age. The DNA test can be used to screen dogs at any age and provides a means of eliminating the causal mutation from the Labrador Retriever gene pool.

Dogs affected with MCD will develop cloudy eyes, due to an abnormal accumulation of carbohydrates (known as glycosaminoglycans) in their corneas. The only treatment for the disease in people is to surgically perform a corneal transplant; however this has not yet been performed successfully in the dog for the treatment of MCD.

Dr Cathryn Mellersh, Head of Canine Genetics at the Animal Health Trust, said: "We're really pleased to be able to provide this new test in 2015. Screening Labradors for the mutation

responsible for this condition will help to identify those dogs at risk of developing MCD, and/or passing it on to their puppies. Dogs don't typically develop MCD until middle age – so without a DNA test there is a chance that affected dogs are unknowingly bred from. Now, affected and carriers dogs can easily be identified through one simple test giving breeders peace of mind.

"By developing this test and encouraging screening within the Labrador population we hope that this horrible disease can now be eliminated from the breed. This is the aim behind all of our work in canine genetics and we're thrilled to have been able to make such good progress in developing this test after MCD was first reported in Labradors by one of our own veterinary ophthalmologists in 2013. Since then we've worked closely with the ophthalmology team here at the Animal Health Trust and Labrador owners and breeders from various European countries and have managed to identify the mutation and launch this test within two years, which is great news for Labrador owners."

Caroline Kisko, Kennel Club Secretary, said: "The Labrador is the most popular breed in the UK, so there is certainly a high demand for puppies, and it is crucial that those being bred are as healthy as possible.

"This test will further assist breeders of Labradors in breeding healthy, happy examples of the breed and we are delighted to be able to offer another tool to improve and maintain the breed's health.

"The work carried out at the Kennel Club Genetics Centre at the Animal Health Trust really does make a massive difference to the lives of dogs and we are thrilled that Labrador breeders will now be able to make use of another health test to protect the health of the breed they love."

To order the test, please visit [www.ahtdnatesting.co.uk](http://www.ahtdnatesting.co.uk). A 10% discount is available when at least 20 samples are submitted within a month. Interested parties should contact [dnatesting@aht.org.uk](mailto:dnatesting@aht.org.uk) with a start date to request a discount code.

**Ends**

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**Breeding Advice:**

The MCD mutation is recessive so both clear and carrier dogs can be safely bred with, provided at least one of the mating pair is clear of the mutation. Carriers should always be included in the first one to two generations that follow the launch of a DNA test for a recessive mutation, regardless of the frequency of the mutation, to give breeders the opportunity to capture desirable traits, such as breed type and temperament, before they start to select dogs that are clear of the mutation.

Elimination of the MCD mutation from the breed should be the long-term goal, now that a DNA test for that mutation is available. But, providing all breeding dogs are tested for the mutation prior to mating, Labrador breeders should take their time and ensure that desirable traits are not eliminated along with the disease mutation and that the genetic diversity of the breed is not reduced.

MCD was first reported in the dog by veterinary ophthalmologists at the Animal Health Trust in 2013. Since then multiple Labrador Retrievers have been diagnosed with this condition from several European countries.

**Additional notes:**

- The **Animal Health Trust** is one of the UK's leading veterinary charities, employing more than 200 scientists, vets and support workers. It aims to improve the health and welfare of horses, dogs and cats through research. It also provides specialist referral services and continuous education to vets. Visit our website at [www.aht.org.uk](http://www.aht.org.uk)
- The Kennel Club Charitable Trust has donated more than £8 million to help improve the lives of dogs since it was established in 1987. The Trust awards grants to welfare organisations which make a difference to dogs' lives, such as Safe and Sound, and also provides financial support to canine scientific research and support charities.
- Scientists and veterinary clinicians from the AHT will be on The Kennel Club's 'Breeding for the Future' Stand for the duration of Crufts. Along with senior personnel from the Kennel Club, they will be on hand to answer queries regarding the Genetics and Cancer Centre.