

We all value good health in our dogs – working and show ones. When we are looking for a little new pup, we check that the parents have been hip scored (and the scores are not too high) and we also look out for if the parents have a current eye certificate. Some dogs can suffer from different eye diseases and until recently, you had to take your dog to an eye clinic and have him checked by a specialist vet in order to find out if the dog had any signs of any known eye disease.

There are several different eye diseases, like cataract, where it's not quite clear how these are passed on to the offspring, nor how they affect the eye sight of the dog. This is, however, not the case with the, perhaps, most feared of all eye diseases amongst retrievers: PRACD (progressive rod-cone degeneration) which is a type of PRA (Progressive Retinal Atrophy) known to affect several different dog breeds. This disease causes cells in the retina at the back of the eye to degenerate and die, causing blindness in most affected dogs. It's not possible to tell when the dog will go blind – this could happen when it is 4 years old or maybe later when it is 9 years old. Apart from knowing how pracd-PRA affects dogs, it's also known that this disease is passed on from parents to pup. Until now, it has not been possible to detect pracd-PRA, via an eye clinic test before the dog started to be affected. Bearing in mind this may happen late in the dog's life, the affected dog may already have sired or had several litters of pups.

Optigen

Optigen is the name of an American company which have recently managed to find and isolate the gene that causes pracd-PRA in Labradors. This means that even in pups, it is now 100% possible to tell if the pup is likely to suffer from pracd-PRA later on in life. The DNA test can be done either from a blood sample or mouth swap from the dog and you'll receive the result within 2-6 weeks.

The test will give you one of these three results:

“Normal/clear” – the dog doesn't have the gene and will never get pracd-PRA nor is it not possible for the dog to pass on pracd-PRA to any of its offspring.

“Carrier” – the dog carries one pracd-PRA gene and will never develop pracd-PRA but will be able to pass on the gene to its offspring.

“Affected” – the dog has pracd-PRA and is very likely to go blind. This also means that the dog's offspring will be either 'carrier' or 'affected'. A dog needs to have the gene twice in order to be 'affected'.

How Can We use this test?

If you 'only' want to use your dog as a working dog, it doesn't really matter if the dog/pup is 'clear' or 'carrier' as the dog will never get pracd-PRA. Should you, however, wish to breed your bitch or dog, the test could serve as an important tool on your choice of bitch or stud dog.

If you breed two 'clear' dogs it will be possible to guarantee that all the pups in the litter will have a 'clear' status. If you breed two dogs, one is a 'carrier' and one is 'clear', you should in theory end up with a litter which will have 50% 'clear' pups and 50% 'carriers'. Should someone wish to breed from some of the pups, it would be a very good idea to optigen test the litter or at least the pups which the owners wish to breed from. As mentioned earlier on, a dog needs to have the gene twice in order to develop pracd-PRA and this risk is significant should you breed two 'carriers' as both the mother

and father could pass on the gen. Should you breed an 'affected' dog, all offspring will, as a minimum, be carriers even if it's bred to a 'clear' dog.

Don't Panic!

The near future will bring on a transition period amongst labradors and specifically labradors of working lines. The test is still fairly new and as people are starting to have their dogs tested some very well known stud dogs are now found to be 'carriers'. These are all excellent working and/or trial dogs and their names are found in many pedigrees. They have all tributed to the working labrador breed by producing some of the best working and trialling labradors in both the UK as well as abroad. Without them, the UK would probably not have some of the best working labradors in the world.

If we were to remove every single 'carrier' working labrador in the UK tomorrow, the labrador breed would collapse. It is possible to breed from a 'carrier' dog/bitch and some very experienced dog breeders may even consider to breed an 'affected' dog, in order to preserve a specific bloodline, but if we wish to strenght the eye health of the labrador the goal must be to try and breed out all 'affected' dogs.

Good luck with your dog's test!

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