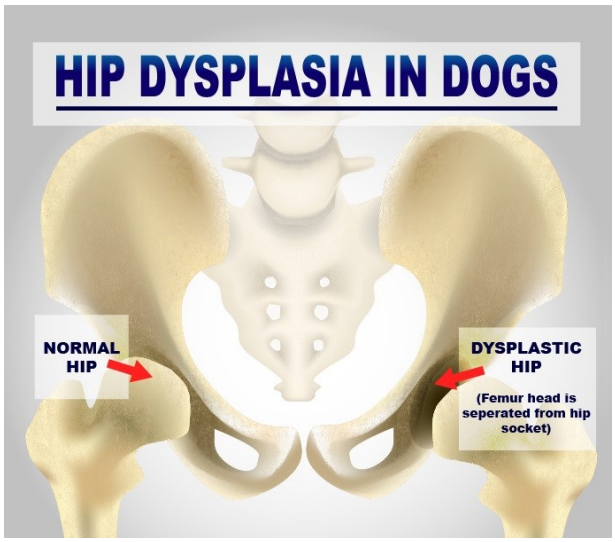
Understanding Health Scores for Beginners

You are going to buy a much loved puppy and now you need to be acquainted with 'health scores and health tests', which can be daunting. Hopefully this article will help you. Dogs and bitches that are going to be used for breeding should have a variety of **Health Tests** carried out, usually before two years old. These include Hip and Elbow Scoring, Heart Testing, Cystinuria testing and more recently some breeders are opting to test for Thrombopathia too.

Some of the tests can be carried out by the dog's own Veterinary Surgeon, as in the case of Hip and Elbow Scoring, or the owner could opt to go to a specialist. Other tests are cheek swabs, which are sent off to a laboratory, either in this country or the USA. Heart Testing must be carried out by an approved Veterinary Cardiologist.

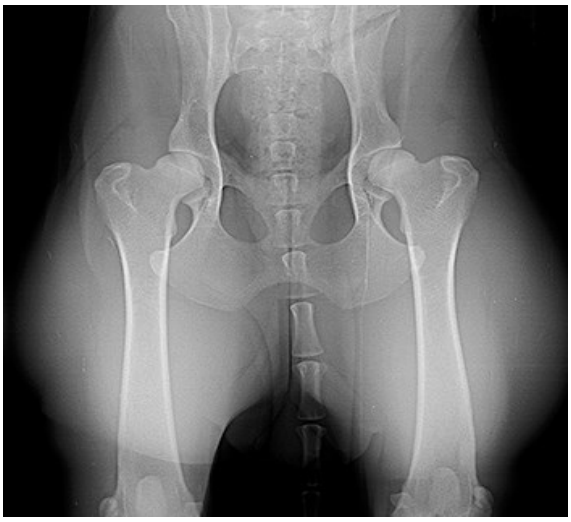
For each of the tests the owner will receive a certificate, showing the result of each test, in the case of a dog which has been scored by the BVA, (British Veterinary Association), the certificate will be green, and gold for the elbow certificate. Some owners opt to have their dogs scored in the USA by the OFA (Orthopaedic Foundation of America) in this case the certificate is plain white. Some breeders opt to use frozen or chilled semen from other parts of the world, each of these countries will have their own way of scoring or testing, Hungary, for example have a very in-depth and comprehensive elbow scoring scheme, like our hip scoring scheme. Whichever option is used, the breeder should show you each test certificate for BOTH parents. Even though they may not have the original certificates for an stud dog belonging to someone else, they will have photocopies and should be keen for you to see all of the health tests for each parent.



Hip Score

The dog is sedated and laid on his back with the hind legs straightened, an x-ray is taken of the hip area. Vets will also have scanned the dog's microchip to verify identity, which they will send along with the x-ray to the BVA where a panel of orthopaedic specialists will examine the image and agree on a "score" based on several key points for example, the position of the femoral head within the acetabulum, (how well the ball fits into the socket) they will also look for any arthritic changes which may have taken place.

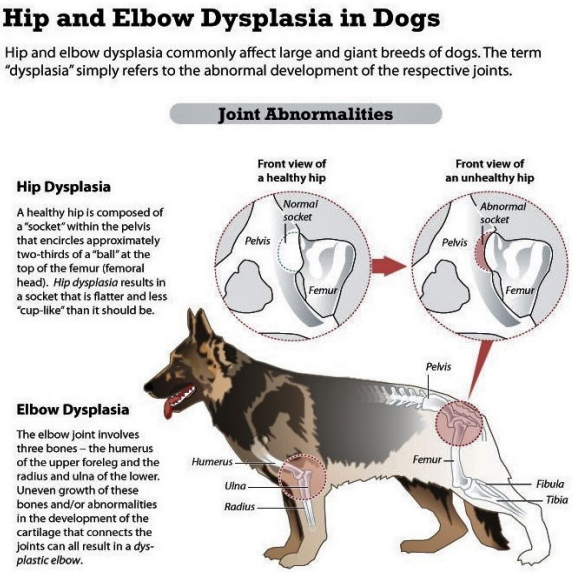
Each hip is examined and scored individually; points are added for each deviation from perfect. A perfect score would be 0 and the worst 53, the scores for each hip are recorded on the certificate side by side. Let's assume the dog has a left hip of 7 and a right hip of 10, the result would be a dog with a *Total* hip score of 17. In conclusion; the best possible total hip score would be 0 and the worst 106.

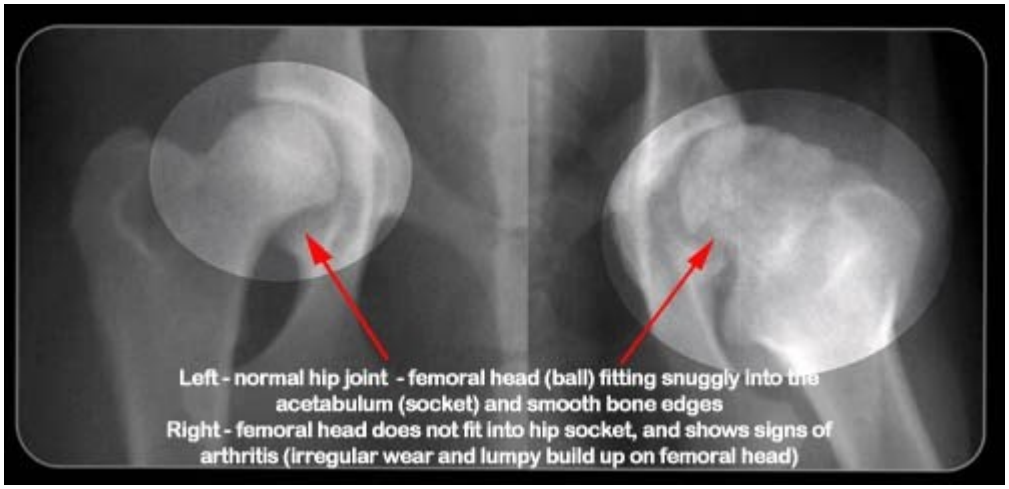


Elbow Score

A very similar procedure as for the hip x-ray, except the position of the dog, who would be lying on its side, 2 pictures are taken of each elbow, one with the foreleg in a straight position and one with the elbow flexed or bent. Again, all four elbow x-rays are sent to the BVA, usually dogs have both elbows and hips carried out at the same time.

This time the result is a little harder to understand or explain as the "score or grade" is either 0, 1, 2, or 3, but again 0/0 is the aim. This time only the highest grade or score is used for a total figure, for example a dog with a left elbow 0 and right elbow of 1 would be known as a dog with an elbow grade of 1. At this moment in time the Kennel Club advises that only dogs with an elbow grade of 0 or 1 should be used for breeding, so dogs with a 2 or 3 result should not be used.



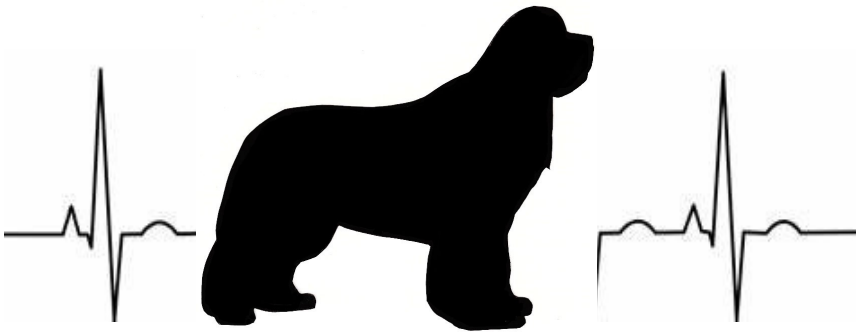


Heart testing

There are a few different ways to listen to a dog's heart. One is auscultation, which could be done by the dog's own vet listening to the dog's heart with a stethoscope. Another would be a specialist veterinary cardiologist also using a stethoscope. Either of these methods can indicate a problem, but the only acceptable method of heart testing Newfoundlands is by an approved veterinary cardiologist using a colour flow echo doppler machine. Such machines are extremely expensive and increasingly sensitive to detecting the tiniest fluctuations in blood flow through the heart, valve efficiency etc.

There are three results from a "doppler": normal, equivocal, and abnormal. Normal and abnormal are clear to understand but equivocal is the grey area in between. The dog could be marked as such simply because the blood flow through the heart is slightly too quick, which may be due to the stress of being in an unfamiliar location, lying on its side with owner and veterinary nurses holding the dog still (or trying to), as there is clearly no sedation allowed during this process, or the cardiologist would get an unnatural reading. As yet, the Kennel Club give no guidance in this field as it has mainly been a breed club led initiative.

There are a couple of hereditary heart issues that beset Newfoundlands, primarily SAS (Sub Aortic Stenosis) and DCM (Dilated Cardio Myopathy), which is generally found in older dogs but can sometimes affect dogs in their youth. The cardiologist will be looking for any signs of either condition.



Cystinuria

A hereditary condition found in some breeds, which is now an entirely preventable condition. It is the dog's inability to filter Cystine from urine, which results in the build up of crystals that lodge in the bladder. It can go unnoticed until the "stones" or the inability to pass them, become very painful and must be surgically removed. The dog will be on a specific veterinary diet for the rest of its life. A simple painless cheek swab test is carried out by the owner and sent to a recognised laboratory for testing. The result can be one of three: clear, affected or a carrier. No two carriers should ever be bred together, but it is permissible to breed a carrier dog to a clear dog, which will result in some of the resulting offspring to be carriers, and some to be clear. Obviously no affected dogs should ever be bred from.

Thrombopathia is dealt with in another article in this Newfletter. A relatively unheard-of hereditary condition to this breed until recently, in which the blood is unable to clot. So any wound, cutting teeth, or normal oestrus cycle (being in season) could lead to a severe haemorrhage or even death.

It is best to test for this condition alongside the Cystinuria testing, as once again the test is via a simple cheek swab. The result is either affected or clear. Jacqui Woodall