



The Golden Retriever Club of America, Inc.

Health Screenings for the Parents of a Litter

All prospective puppy buyers want their new puppy to have the best possible chance for a long and healthy life, and regular veterinary care is important toward achieving that goal. But in addition, the risks for many significant health issues can be greatly reduced through careful breeding practices, beginning with certain screening examinations of the parents of a litter. Each breed (and mixed-bred dogs too) has its own particular hereditary problems, and Golden Retrievers are no exception. Failure to screen for these conditions before breeding results in taking unnecessary risks for genetic disease, and frequently leads to distress for the buyer and dog alike. Below is a discussion of important diseases for which the GRCA Code of Ethics recommends pre-breeding health testing. **Reputable breeders are expected to conduct screening examinations for these diseases on the parents of a litter, and to disclose the results to prospective puppy buyers.**

HIP DYSPLASIA (HD)

Hip dysplasia refers to abnormal formation of the “ball-and-socket” hip joint and occurs in many breeds, particularly larger dogs. It is primarily inherited, and development is believed to be influenced by multiple genes. However, risk and severity of hip dysplasia may also be increased by environmental factors such as overfeeding that leads to rapid growth during early puppyhood, neutering prior to maturity, and possibly certain types of exercise.

Signs of hip dysplasia cannot be detected in very young puppies, but often appear between four and twelve months of age. Symptoms can vary widely from mild stiffness after exercise to severe lameness. Improvement or even resolution of symptoms can occur as the dog matures and muscles stabilize the joint; however, dysplastic dogs usually develop some degree of arthritis and discomfort later in life.

Dogs must be 24 months of age to receive final hip certification, and screening hip x-rays should be sent to either the Orthopedic Foundation for Animals (OFA) or to PennHIP for diagnostic evaluation. The two evaluation procedures differ somewhat but both are acceptable, and GRCA encourages all Golden breeders to do this pre-breeding screening examination.

Dysplastic dogs generally are not used for breeding, but may lead long, happy lives. The radiographic appearance of the hips does not always correlate with clinical symptoms, and many dysplastic Golden Retrievers show no outward signs until middle or older age when secondary arthritis may cause increasing discomfort. However, regular, moderate exercise and weight control are important to managing all dogs with hip dysplasia, even those without symptoms. Depending on severity, dogs with symptomatic disease may be treated with dietary supplements, medication, and/or surgery.

ELBOW DYSPLASIA (ED)

Elbow dysplasia often first appears as front leg lameness in young dogs, although symptoms can appear at any age. While not as common as hip dysplasia, elbow dysplasia is estimated to affect approximately 10% of Golden Retrievers. Like hip dysplasia, many affected dogs have no symptoms, yet can pass more serious disease to their offspring. For other affected dogs, symptoms range from mild stiffness to severe lameness.

Elbow dysplasia is primarily inherited and development is believed to be influenced by multiple genes. However, severity of elbow dysplasia may also be increased by rapid growth during early puppyhood as a result of over-feeding.

Dogs must be 24 months of age to receive final elbow certification, and screening elbow x-rays should be submitted to the OFA for diagnostic evaluation. Elbow dysplasia can be difficult to diagnose in its early stages or in very mildly affected dogs, and even non-breeding dogs and dogs under 24 months with unexplained front lameness can use OFA's diagnostic services when the diagnosis is uncertain.

Although dogs with elbow dysplasia generally are not bred, many lead normal, happy lives. Depending on severity, dogs with symptomatic disease may be managed by weight control, dietary supplements, medication, and/or surgery.

EYE DISEASE

Hereditary cataracts are fairly common in Golden Retrievers. These cataracts, sometimes called juvenile cataracts, usually appear between 1-3 years of age, but fortunately do not usually cause any functional impairment. Non-hereditary cataracts also occur, and examination by a board-certified veterinary ophthalmologist is necessary to determine if the cataract is suspected to be hereditary.

An eye disease called pigmentary uveitis is of emerging concern in the breed, and while it is believed to have a genetic basis, at this time there are no satisfactory tools that breeders can use to be certain to avoid producing affected puppies. Pigmentary uveitis typically develops in middle-aged or senior Golden Retrievers, making it very important to continue yearly eye examinations for the lifetime of any dog that has been bred. Early stages of the disease are usually very mild with no outward signs, but as pigmentary uveitis progresses, symptoms such as redness and tearing may appear, and over time the disease may progress to glaucoma. This can be a serious quality of life issue because pain from glaucoma may necessitate surgery to remove the affected eye(s). Please see "Pigmentary Uveitis Letter to Owners" on the Health Section of the GRCA website www.grca.org for more information about this disease, including recommendations to help reduce the risks of the most significant health consequences.

Eyelid and eyelash disorders also may occur in the breed, and are generally believed to have a hereditary basis. Entropion and ectropion are conditions that cause the eyelids to roll inward or outward, respectively; and distichiasis is a condition in which misdirected hairs touch and irritate the surface of the eye. Depending on severity, surgery may be advised to correct these problems. Although dogs with these conditions can receive eye certifications, these diagnoses will be noted on the forms.

Annual examination by a board certified veterinary ophthalmologist is recommended for the lifetime of any dog that has been bred, because hereditary eye problems can develop at varying ages. In particular, pigmentary uveitis often develops very late in life. Eye exams should be certified by the Canine Eye Registration Foundation (CERF) or the OFA, and are valid for only 12 months from the date of examination.

In addition, a few families of Golden Retrievers carry genes for progressive retinal atrophy (PRA), a gradual deterioration of the light-receptive area (retina) of the eye that may result in blindness. There are several DNA tests to help guide breeders using these lines, so that they can avoid producing affected puppies. It is acceptable to breed dogs that are carriers for PRA, providing the mate has been DNA tested as normal; and puppies produced from such matings are not at elevated risk to develop the disease.

HEART DISEASE (SAS)

A small percentage of Golden Retrievers are affected with a hereditary heart disease called subvalvular aortic stenosis. While this is not common in the breed, it can be serious, so all prospective breeding dogs should be examined over the age of 12 months by a board certified veterinary cardiologist. If a murmur is detected through auscultation (listening with a stethoscope), additional diagnostic tests are available and may be recommended. Normal cardiac exams should be certified by the OFA, and dogs with hereditary heart disease generally should not be bred.

CERTIFICATIONS and CLEARANCES

The GRCA Code of Ethics requests that results from hip, elbow, eye, and heart examinations be placed in the public record on searchable databases, and the most widely used of such databases is provided by the Orthopedic Foundation for Animals at www.offa.org. Breeders often describe their dogs as “hip, elbow, eye, and heart certified” or as having “all their clearances” and these statements usually can be verified on the OFA website. Records can be accessed by searching using the dog’s full registered name (with exact spelling) or registration number, and reputable breeders should not hesitate to provide you with this information.

Many breeders use lines with health clearances that extend back to multiple generations of ancestors, and health clearances that include grandparents, great-grandparents, and even beyond offer additional layers of protection to the puppies. Risk can never be zero – and in some cases environmental influences also play a role – but health testing of several generations of ancestors offers the best possible chance that the puppy will not develop these genetic diseases.

There are additional conditions such as hypothyroidism, epilepsy, skin disease, cancer, etc, for which routine screening of Golden Retrievers is not performed. This may be because examination standards or tests have not yet been developed, because the incidence of the disease is low in the breed, or for other reasons. Potential buyers should feel free to ask the breeder about these or any subjects of concern to them, and the exchange of such information is an expected and customary practice.