



**GOLDEN RETRIEVER
HEALTH TESTS REQUIRED FOR BREEDING**

<u>CONDITION</u>	<u>DESCRIPTION</u>	<u>HOW IS THE TEST DONE</u>	<u>FREQUENCY OF TEST</u>	<u>POTENTIAL OUTCOMES</u>	<u>COMMENTS</u>	<u>KC ASSURED BREEDER (ABS) REQUIREMENT</u>
HIP DYSPLASIA (HD) 	Abnormal development of the hip joint leading to arthritic changes	X-Ray which is sent off for scoring by a British Veterinary Association panel	Once in the lifetime of the dog but not before 12 months	Evidence of HD. Scores for each hip are added together to get an overall hip score. Scores range from 0 to 106, with the lower the score the better	Breeders are advised to only to breed from dogs which score below the breed average. At the time of writing the breed average is 12	Mandatory
ELBOW DYSPLASIA (ED) 	Abnormal development of the elbow joint leading to osteoarthritis	As above	As above	Evidence of ED. Both elbows are graded (between 0-3), but only the highest grade is used as an overall elbow grade	Breeders are advised to only to breed from dogs which have an elbow grade of 0 or 1	Mandatory (from June 2020)
EYE CONDITIONS 						
MULTIFOCAL RETINAL DYSPLASIA (MRD)	Abnormal development of the retina - the layers do not form together properly, causing 'folds' and risking retinal detachment	Drops put into eyes followed by a non-invasive inspection	Annually	Unaffected or Affected	The condition does not progress and can disappear with maturity. This is included on Schedule A (the list of eye diseases found on the eye certificate)	Mandatory
GENERAL PROGRESSIVE ROD CONE DEGENERATION (G-PRA)	A type of PRA (see below), due to degeneration of the rod and cone photoreceptor cells of the retina	As above	As above	As above	This is included on Schedule A	Mandatory
RETINAL PIGMENT EPITHELIAL DYSTROPHY (RPED)	Loss of function of the RPE, leading to photoreceptor degeneration and ultimately blindness	As above	As above	As above	This is included on Schedule A	Mandatory
HEREDITARY CATERACT (HC)	The lens in the eye clouds over leading to loss of vision over time	As above	As above	As above	This is included on Schedule A	Mandatory

GLAUCOMA	A painful condition caused by abnormalities in the drainage area of the anterior eye that usually leads to the loss of one or both eyes	Gonioscopy – eye drops, followed a lens put over the eye in order to look for pectinate ligament abnormalities	Every 3 years	Eyes are graded as follows: 0 - Unaffected 1 - Mildly affected 2 - Moderately affected 3 - Severely affected	From Jan 2020 this is included on Schedule A Advice is not to breed from a 3 and only mate a 1 to a 0	Mandatory
PROGRESSIVE RETINAL ATROPHY (PRA 1 + 2)	A gradual deterioration of the retina leading to blindness in affected dogs	DNA test - the dog's cheek is swabbed and sent off to a lab for analysis	Once in the lifetime of the dog	Clear Carrier or Affected	Most dogs are clear by parentage**, unless one parent is a carrier. Breeding advice is only to mate carriers to clear ***See below for Mode of Autosomal Recessive Inheritance	Recommended
ICHTHYOSIS (ICT) 	A skin condition resulting in the outer layer not developing properly, leading to rough, flaking skin	As above	Once in the lifetime of the dog	Clear Carrier or Affected	As above	Recommended

Notes:

*Additional ABS requirement: 1) Bitches not to be bred from under 18 months 2) No more than one litter from a bitch in a 12 month period

** From January 2022, the KC will limit the assignment of hereditary clear to 2 generations without a DNA test

*** Mode of Autosomal Recessive Inheritance:

Status of Parents	Make up of Puppies from the Mating
Clear mated to Clear	100% Clear
Clear to Carrier	50% Clear 50% Carrier
Clear to Affected	100% Carriers
Carrier to Carrier	25% Clear, 50% Carriers, 25% Affected
Carrier to Affected	50% Carrier, 50% Affected
Affected to Affected	100% Affected

Further Information:

Golden Retriever Health Screening: <https://www.thekennelclub.org.uk/services/public/breed/health.aspx?id=2047>

Breeding Advice based on Estimated Breeding Values (EBV's): <https://www.thekennelclub.org.uk/health/for-breeders/breeding-advice/estimated-breeding-values/>