



Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Epithelial dystrophy	Female dogs > 6 y.o	Unknown	NO	5
B	Glaucoma	Variable degrees of pectinate ligament dysplasia, variable onset, usually in young to middle-aged dogs	Unknown	NO	1, 3, 5
C	Cataract	Posterior polar cataracts, uni- or bilateral, occurring between 1 and 4 years, variable progression	Unknown	NO	1, 2, 3, 5
D	Progressive Retinal Atrophy (PRA)	Progressive rod-cone degeneration (prcd) Variable age of onset and rate of progression	Autosomal recessive	Prcd	1, 2, 3, 4
E	Retinal dysplasia	Multifocal	Unknown		5

The ECVO's advice relating to hereditary eye disease control

Please see ECVO Manual chapter 8: VET Advice

Recommendations regarding age and frequency for eye examinations

Please see ECVO Manual chapter 7: ECVO Age and Frequency recommendations

Other ocular disorders (reported)

	Diagnosis	Source
A	Persistent pupillary membranes -iris to iris	ACVO genetics committee Swiss Eye Panel
B	Retinal dysplasia- folds	ACVO genetics committee
C	Distichiasis	ACVO genetics committee
D	Corneal dystrophy – epithelial/stromal	ACVO genetics committee
E	Retinal dysplasia- multifocal, geographic	ACVO genetic committee

References

1. Spiess BM: Vererbte Augenkrankheiten beim Entlebucher Sennenhund (inherited ocular diseases in the Entlebucher Mountain Dog). Schweiz Arch Tierheilk 136:105-110, 1994.
2. Heitmann M, Hamann H, Brahm R, et al: Analysis of prevalence of presumed inherited eye diseases in Entlebucher Mountain Dogs. Vet Ophthalmol 8:145-151, 2005.
3. Kuster N, Hässig M, Spiess B : Vererbte Augenerkrankungen beim Entlebucher Sennenhund in der Schweiz: Eine retrospektive Studie von 1999 – 2009. Schweiz Arch Tierheilk (in press)

4. Zangerl B, Goldstein O, Philp AR, Lindauer SJP, Pearce-Kelling SE, et al: Identical mutation in a novel retinal gene causes progressive rod-cone degeneration in dogs and retinitis pigmentosa in humans. *Genomics* 88:551-563, 2006.
5. Chaudieu, G &Chahory S. (2013) Affections oculaires héréditaires ou a prédisposition raciale chez le chien. Ed. du Point Veterinaire 2nd ed, 213.