Nova Scotia Duck-Tolling Retriever	

Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Progressive Retinal Atrophy (PRA)	4-6 y.o. dogs	Autosomal recessive	prcd	1,2,3,4,5
B	Collie Eye Anomaly (CEA)	Choroidal hypoplasia/ coloboma/ retinal detachment/ retinal hemorrhage	Autosomal recessive for CH/CRD; for coloboma unknown	NHEJ1	2,6,7
C	Cataract	Posterior cortical cataract polar and equatorial in young adults	Unknown	NO	2

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	Corneal dystrophy -epithelial/stromal/endothelial	ACVO genetics committee
B	Distichiasis	ACVO genetics committee
C	Uveal cysts	ACVO genetics committee
D	Persistent pupillary membranes	ACVO genetics committee
E	Retinal dysplasia -folds (mfRD)	ACVO genetics committee

References

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4. Acland GM, Ray K, Mellersh CS, Gu W, Langston AA, Rine J, Ostrander EA, Aguirre GD. Linkage analysis and comparative mapping of canine progressive rod-cone degeneration (prcd) establishes potential locus homology with retinitis pigmentosa (RP17) in humans. Proceeding of the Natlional Academy of Sciences of the United States of America (1998): 95, 3048–3053.

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6. Parker HG, Kukekova AV, Akey DT, et al. Breed relationships facilitate fine-mapping studies: a 7.8-kb deletion cosegregates with Collie eye anomaly across multiple dog breeds. Genome Res. 2007 Nov;17:1562-1571.

7. Lowe JK, Kukekova AV, Kirkness EF, et al. Linkage mapping of the primary disease locus for collie eye anomaly. Genomics. 2003;82:86-95.