

# Golden Retriever

All data as of Dec-31-2021

*Dysplastic rank, all breeds with more than 100 cases*

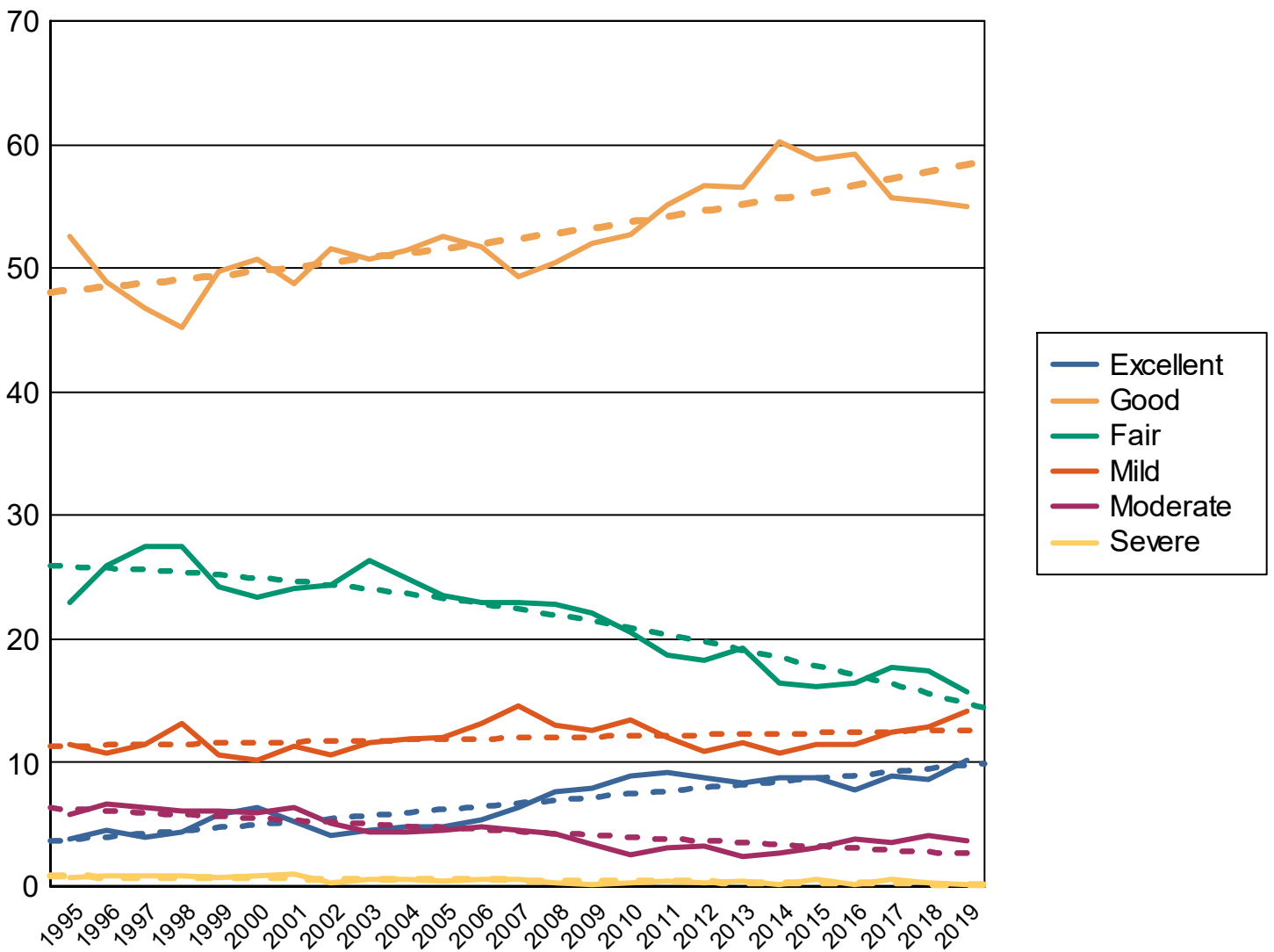
		<i>Normals</i>		<i>Equival or Carrier</i>		<i>Abnormal</i>	
Hips	40 of 196	132838	80.58%	146	0.09%	31873	19.33%
Elbow	34 of 138	55444	88.28%	91	0.14%	7270	11.58%
Congenital Cardiac		37870	99.19%	206	0.54%	105	0.28%
Thyroid		4611	85.67%	463	8.60%	308	5.72%
Chondrodysplasia (Cdpa)		2	100.00%	0		0	
Shoulder		401	97.57%	0		10	2.43%
Gr1 Progressive Retinal Atrophy		2116	98.19%	39	1.81%	0	
OFA EYE Registry		47136	98.08%	0		923	1.92%
Hyperuricosuria		4	100.00%	0		0	
Golden Retriever Neuronal Ceroid Li		3022	95.66%	127	4.02%	10	0.32%
Chondrodystrophy (Cddy)		6	100.00%	0		0	
Int'L Ophthalmological Exam		38	100.00%	0		0	
Legg-Calve-Perthes		388	100.00%	0		0	
Advanced Cardiac		7824	98.24%	90	1.13%	50	0.63%
Gr2 Progressive Retinal Atrophy		1923	96.63%	67	3.37%	0	
Neuronal Ceroid Lipofuscinosis		6	85.71%	1	14.29%	0	
Baer Hearing Test		7	100.00%	0		0	
Arch		9	100.00%	0		0	
Dilated Cardiomyopathy		6	100.00%	0		0	
Sensory Neuropathy		119	100.00%	0		0	
Mizzou Biomarker Study		79	90.80%	0		8	9.20%
Basic Cardiac		3519	99.69%	7	0.20%	4	0.11%
Degenerative Myelopathy		1880	99.16%	6	0.32%	10	0.53%
Ovc Hips		21	100.00%	0		0	
Spine		4	0.73%	0		544	99.27%

Skeletal Dysplasia 2	1	100.00%	0		0	
Retinal Dysplasia /Osd	3	100.00%	0		0	
Progressive Retinal Atrophy	2119	97.47%	54	2.48%	1	0.05%
Int'L Elbow Registry	60	100.00%	0		0	
Ichthyosis	1657	72.64%	575	25.21%	49	2.15%
D Locus	11	100.00%	0		0	
Progressive Retinal Atrophy 3	1	100.00%	0		0	
Canine Multifocal Retinopathy	1	100.00%	0		0	
Ichthyosis Ich2	62	100.00%	0		0	
Von Willebrands	1	100.00%	0		0	
Kidney	2	100.00%	0		0	
Sebaceous Adenitis	3	100.00%	0		0	
Tracheal Hypoplasia	1	100.00%	0		0	
Degenerative Myelopathy B	1	100.00%	0		0	
Degenerative Encephalopathy	4	100.00%	0		0	
Dominant Black	1	100.00%	0		0	
Agouti	1	100.00%	0		0	
Congenital Myasthenic Syndrome	145	100.00%	0		0	
Dentition Database	1329	97.15%	0		39	2.85%
Muscular Dystrophy	728	100.00%	0		0	
Neonatal Encephalopathy W/Seizure	1	100.00%	0		0	
Rcd4 Progressive Retinal Atrophy	2	100.00%	0		0	
International Cardiac Exam	12	100.00%	0		0	
Int'L Hip Registry	61	100.00%	0		0	
Gm2-Gangliosidosis	2	100.00%	0		0	
Exercise Induced Collapse	30	100.00%	0		0	
Patella	2717	99.38%	0		17	0.62%
Gsdca Temperament Test	2	100.00%	0		0	
Cataracts	6	100.00%	0		0	
Brown (Tyrrp 1)	1	100.00%	0		0	
Mcr1 (Elocus)	1	100.00%	0		0	

Serum Bile Acid	1	100.00%	0	0
Ovc Elbows	29	100.00%	0	0
Multiple Drug Resistance (Mdr1)	1	100.00%	0	0

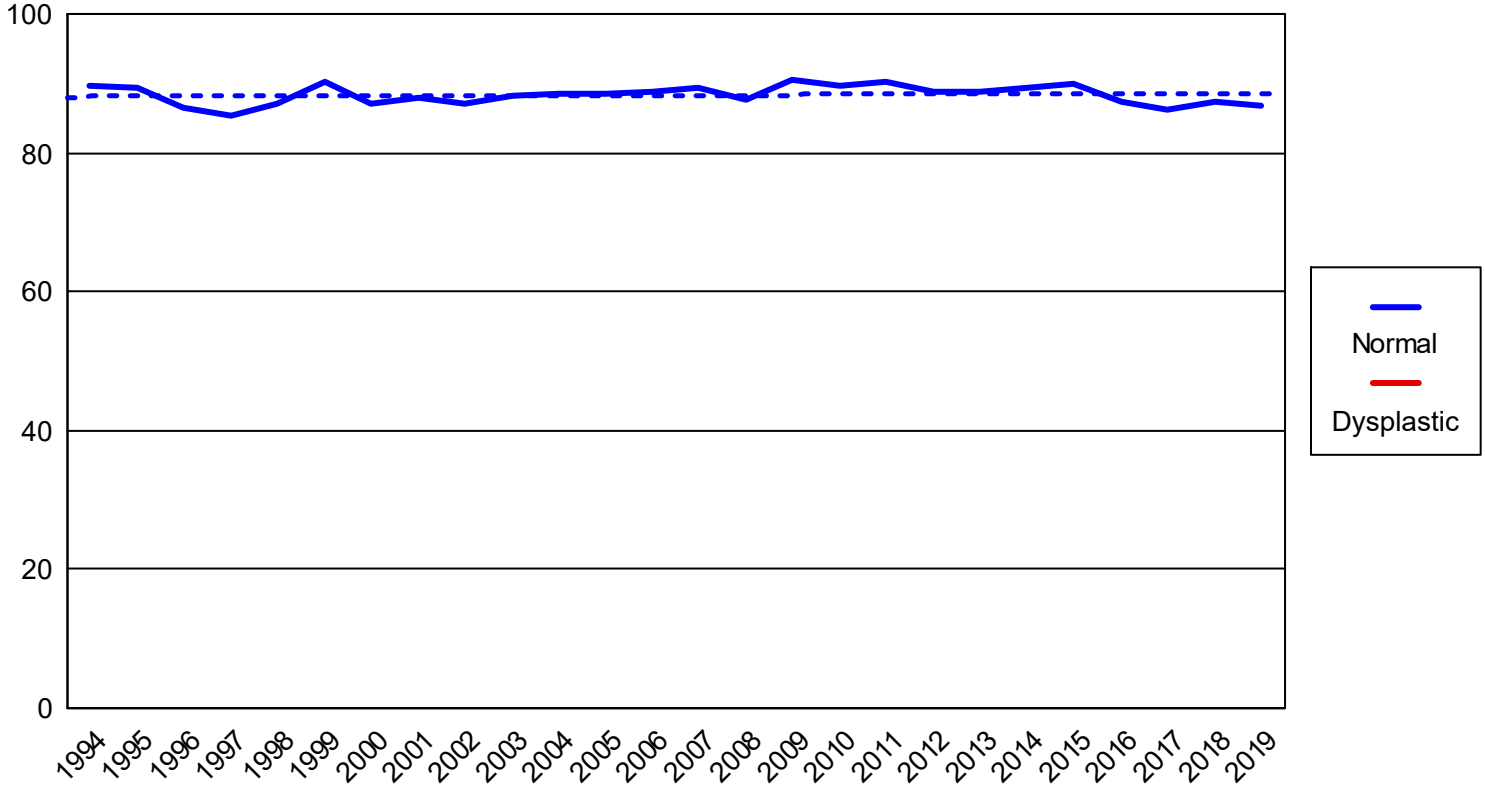
**GOLDEN RETRIEVER**

Hip percentages by rating with trendlines



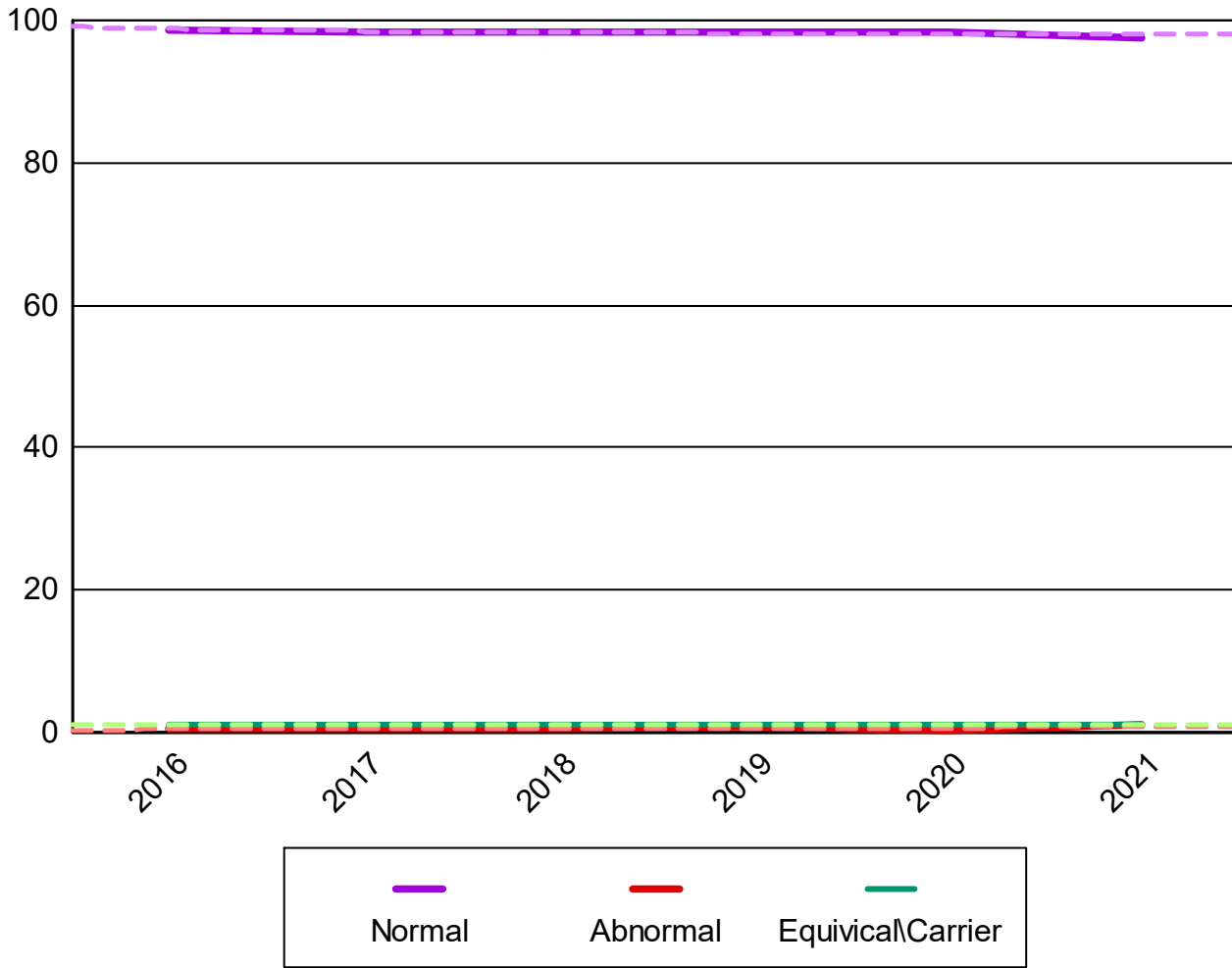
# GOLDEN RETRIEVER

## Elbow percentages by rating with trendlines



ADVANCED CARDIAC

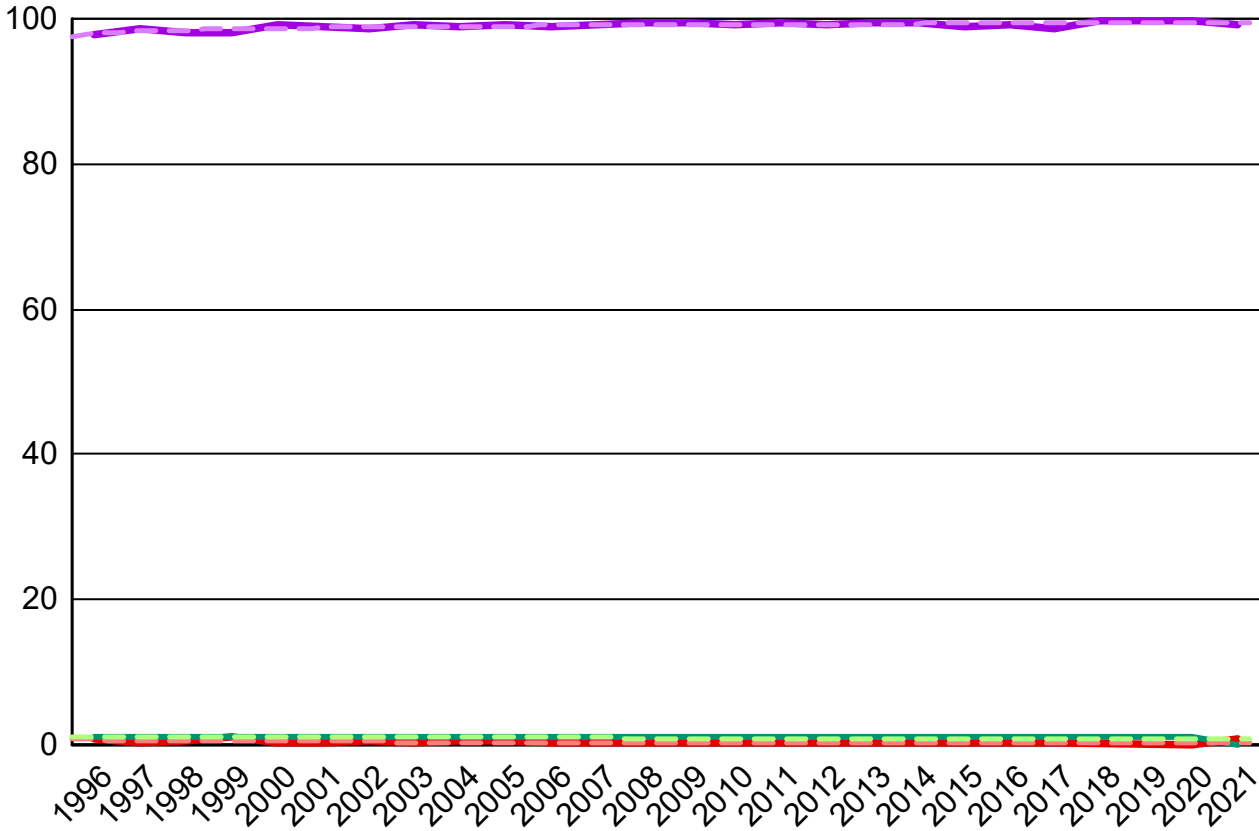
GOLDEN RETRIEVER



GOLDEN RETRIEVER

CONGENITAL CARDIAC

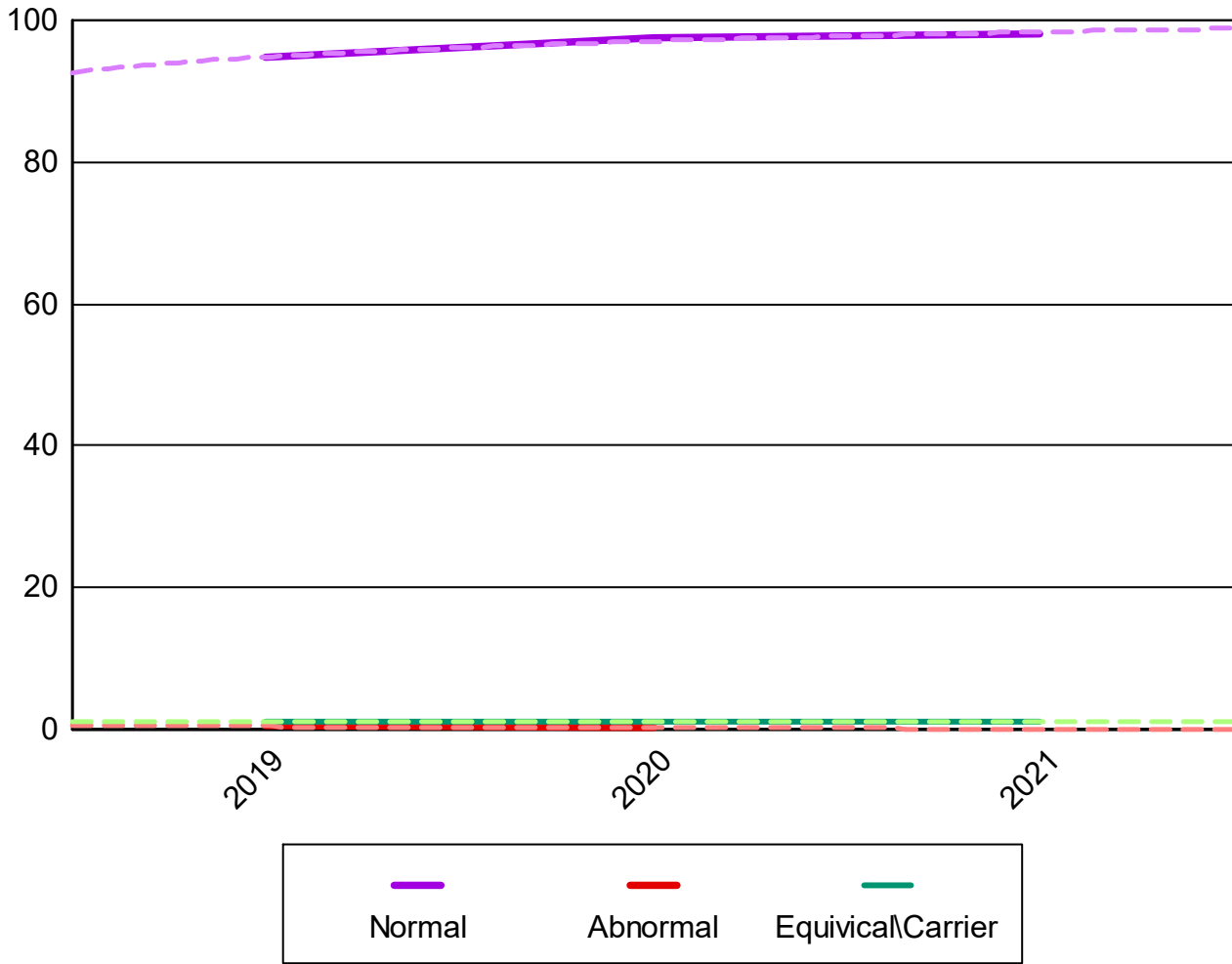
GOLDEN RETRIEVER



GOLDEN RETRIEVER

GOLDEN RETRIEVER NEURONAL CEROID LIPOFUSCINOSIS

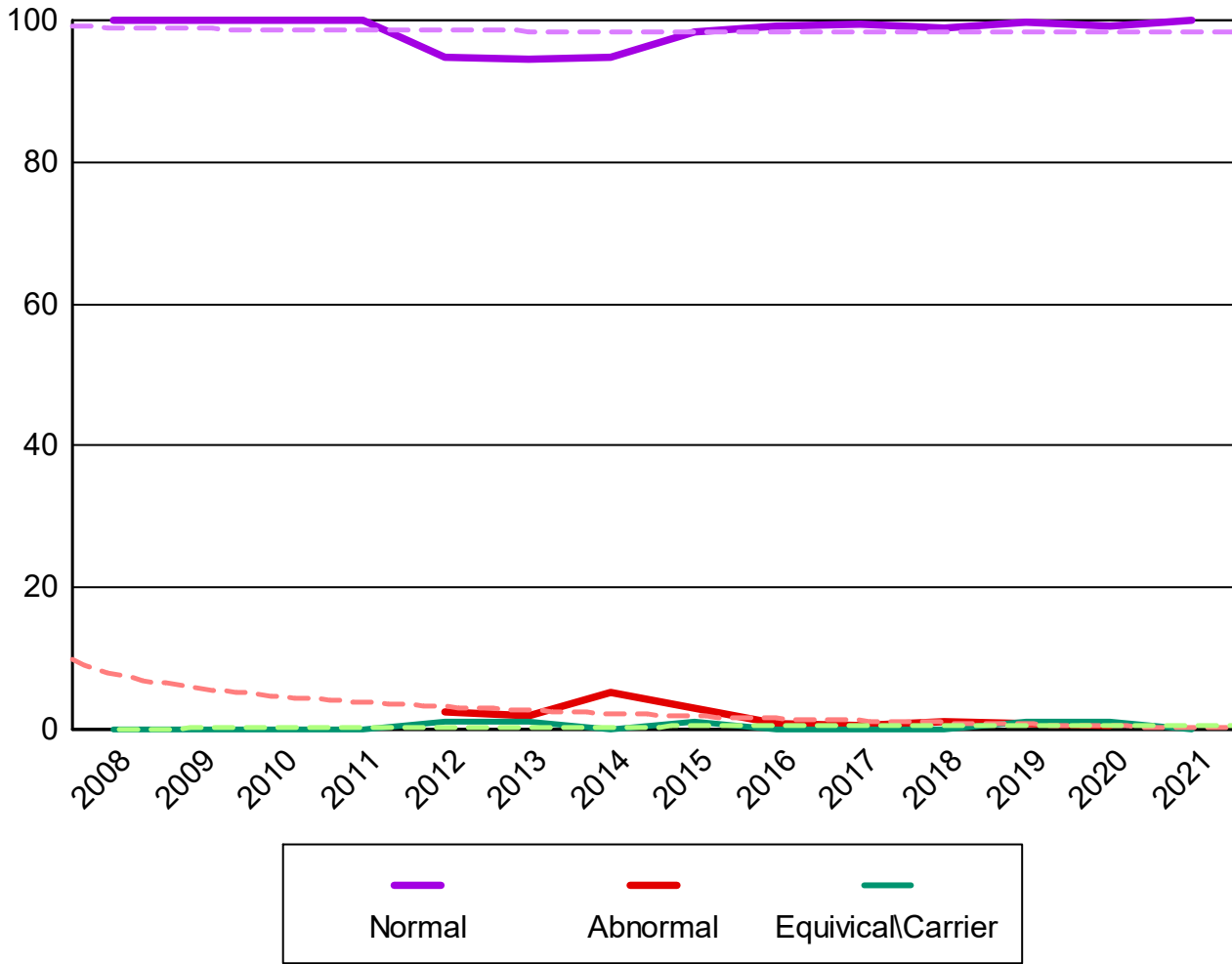
GOLDEN RETRIEVER



GOLDEN RETRIEVER

DEGENERATIVE MYELOPATHY

GOLDEN RETRIEVER

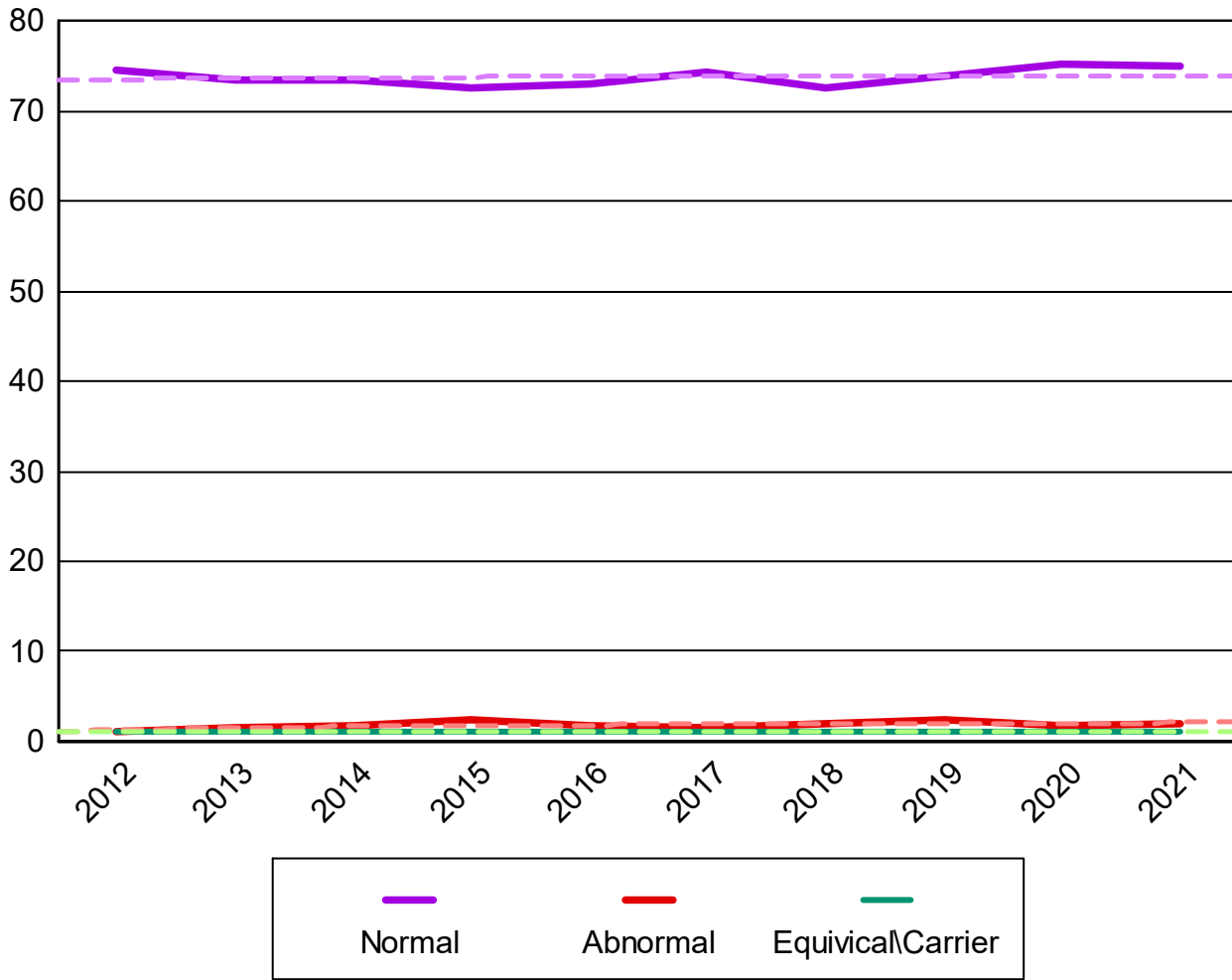


GOLDEN RETRIEVER



EYES

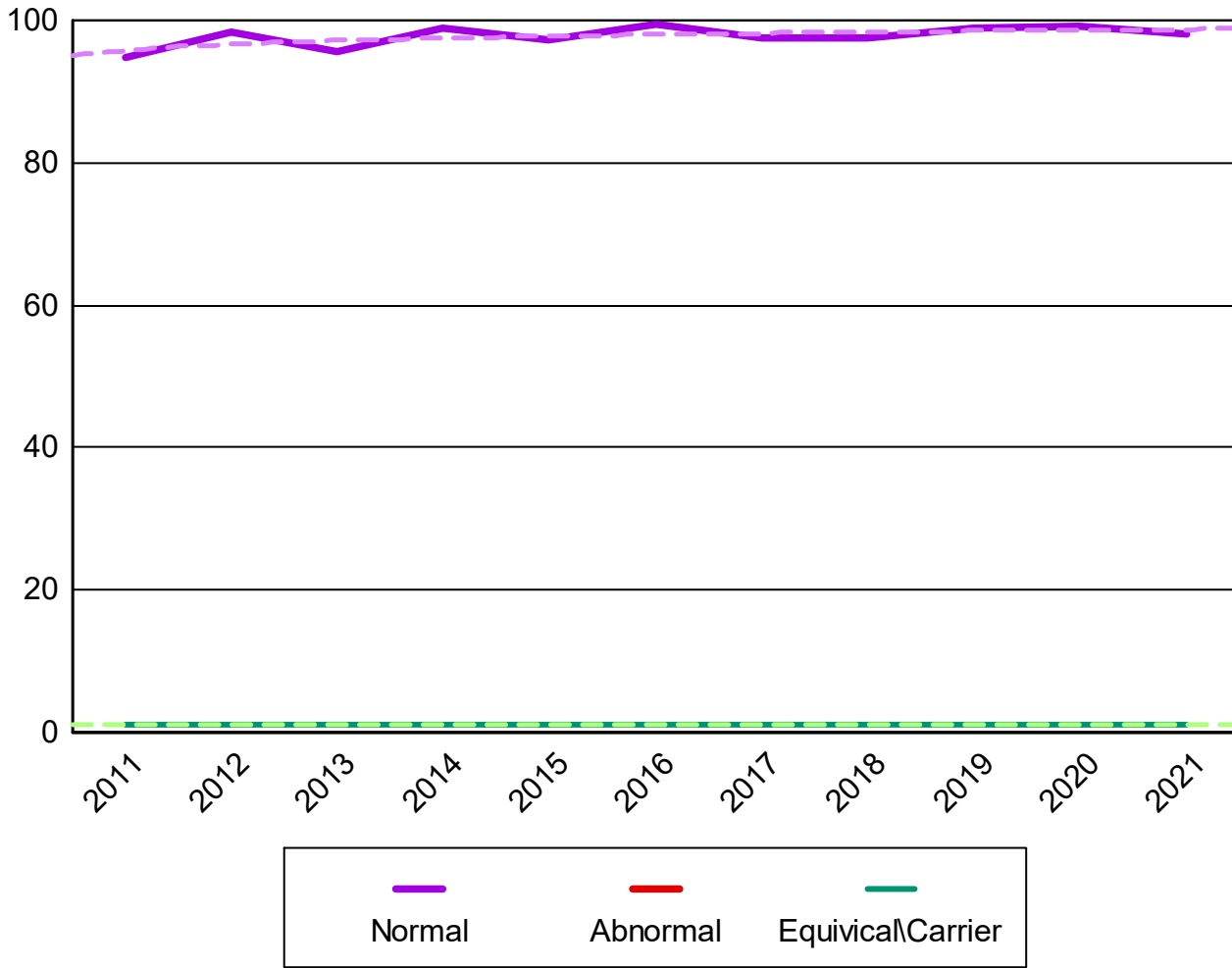
GOLDEN RETRIEVER



GOLDEN RETRIEVER

GR1 PROGRESSIVE RETINAL ATROPHY

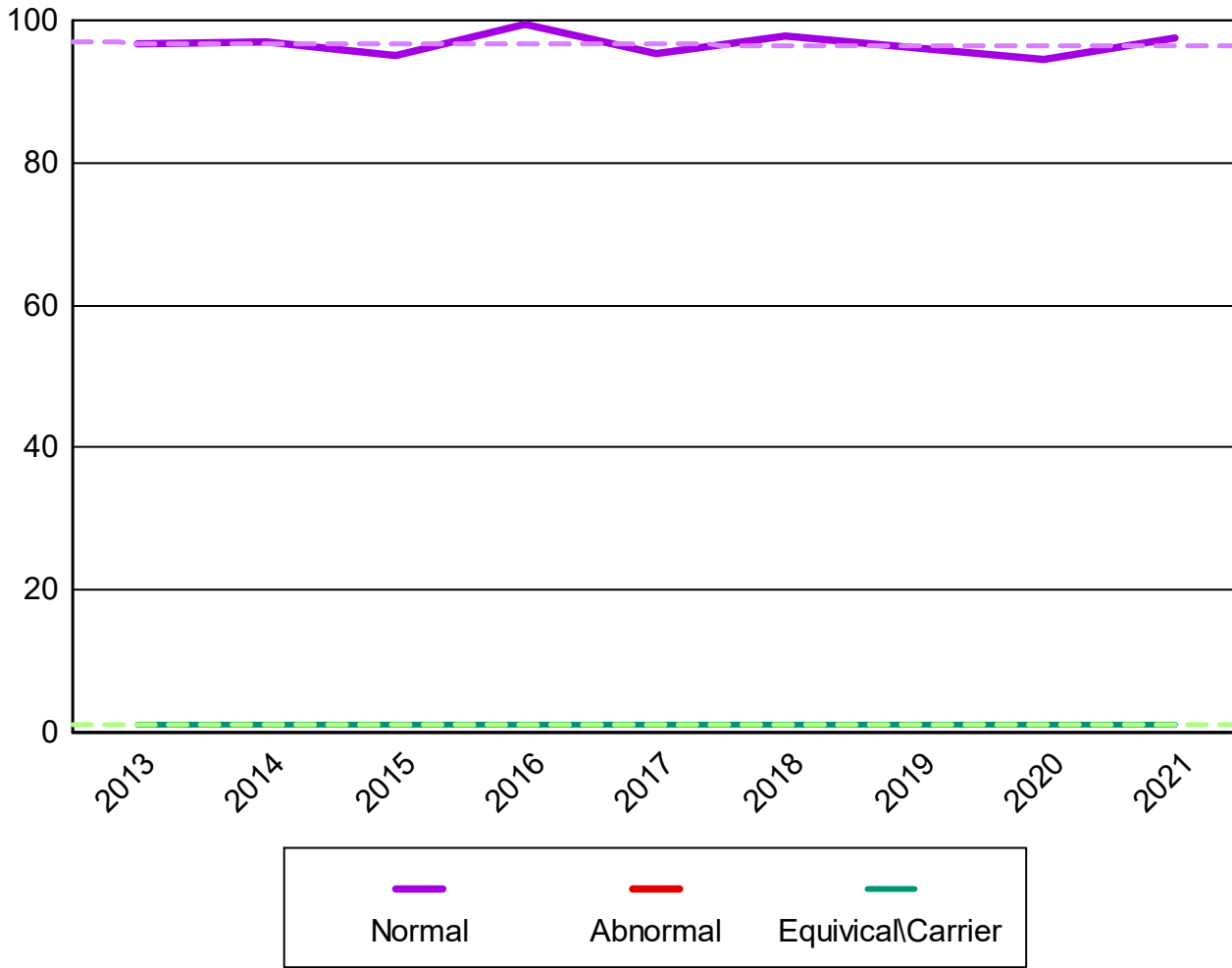
GOLDEN RETRIEVER



GOLDEN RETRIEVER

GR2 PROGRESSIVE RETINAL ATROPHY

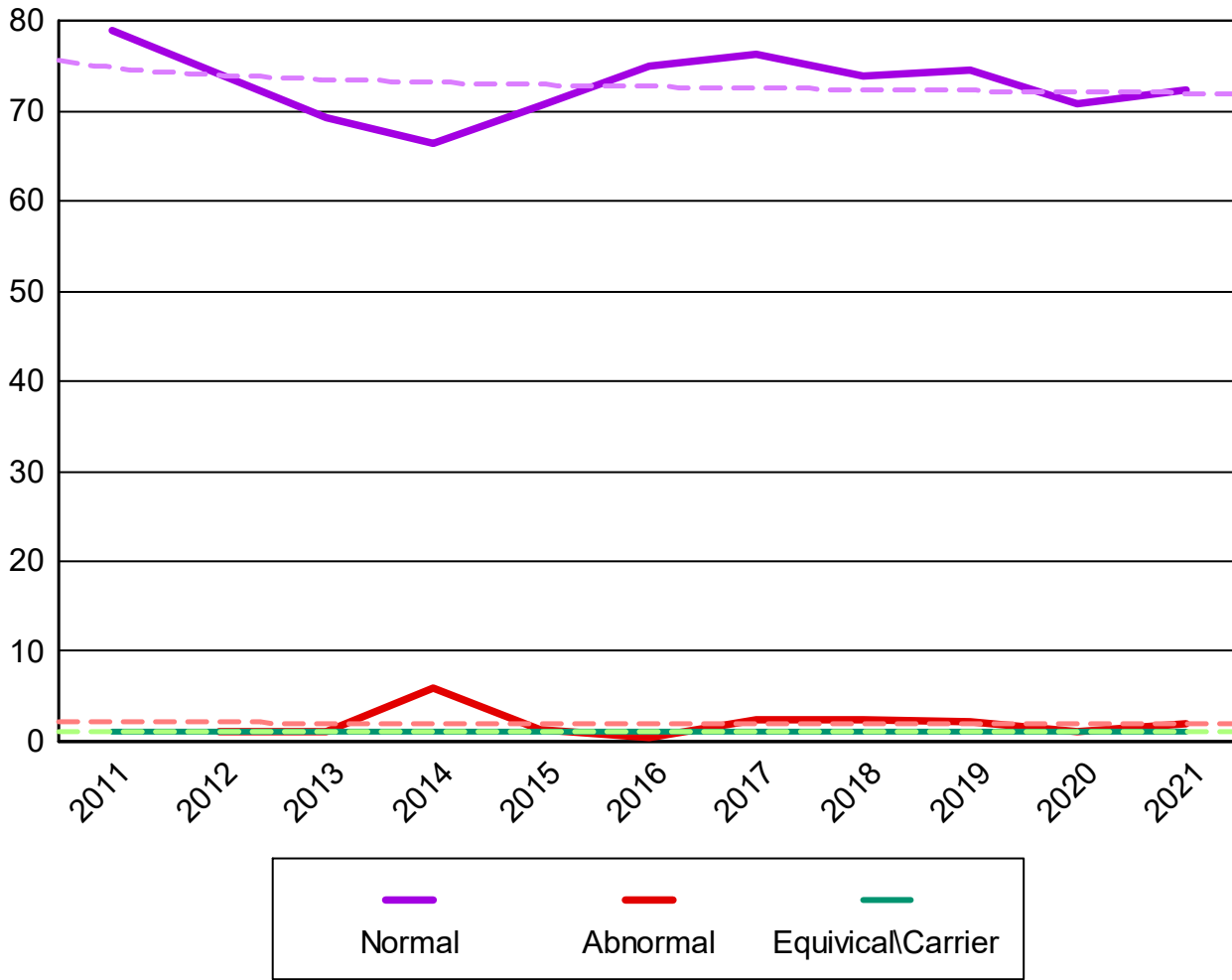
GOLDEN RETRIEVER



GOLDEN RETRIEVER

ICHTHYOSIS

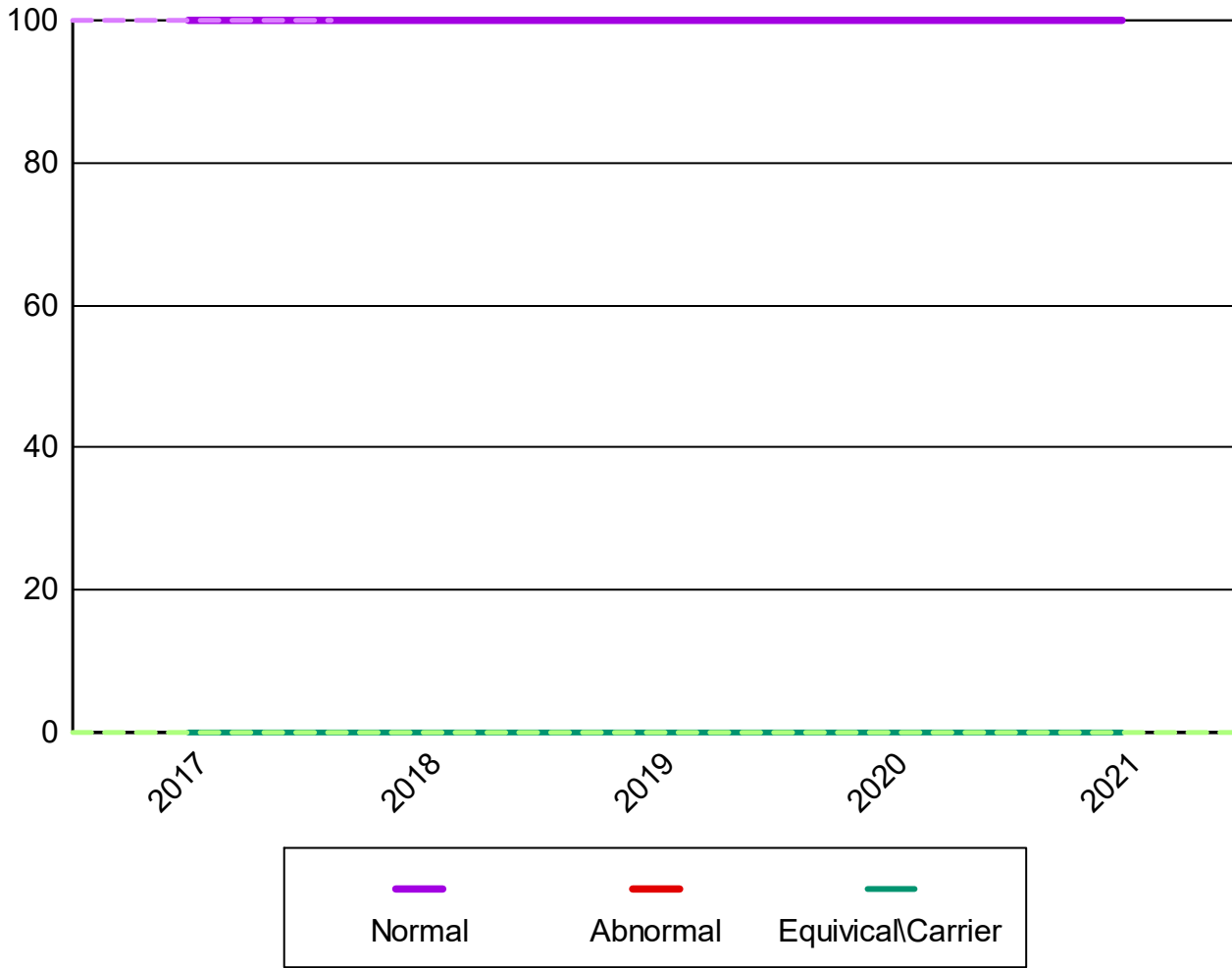
GOLDEN RETRIEVER



GOLDEN RETRIEVER

MUSCULAR DYSTROPHY

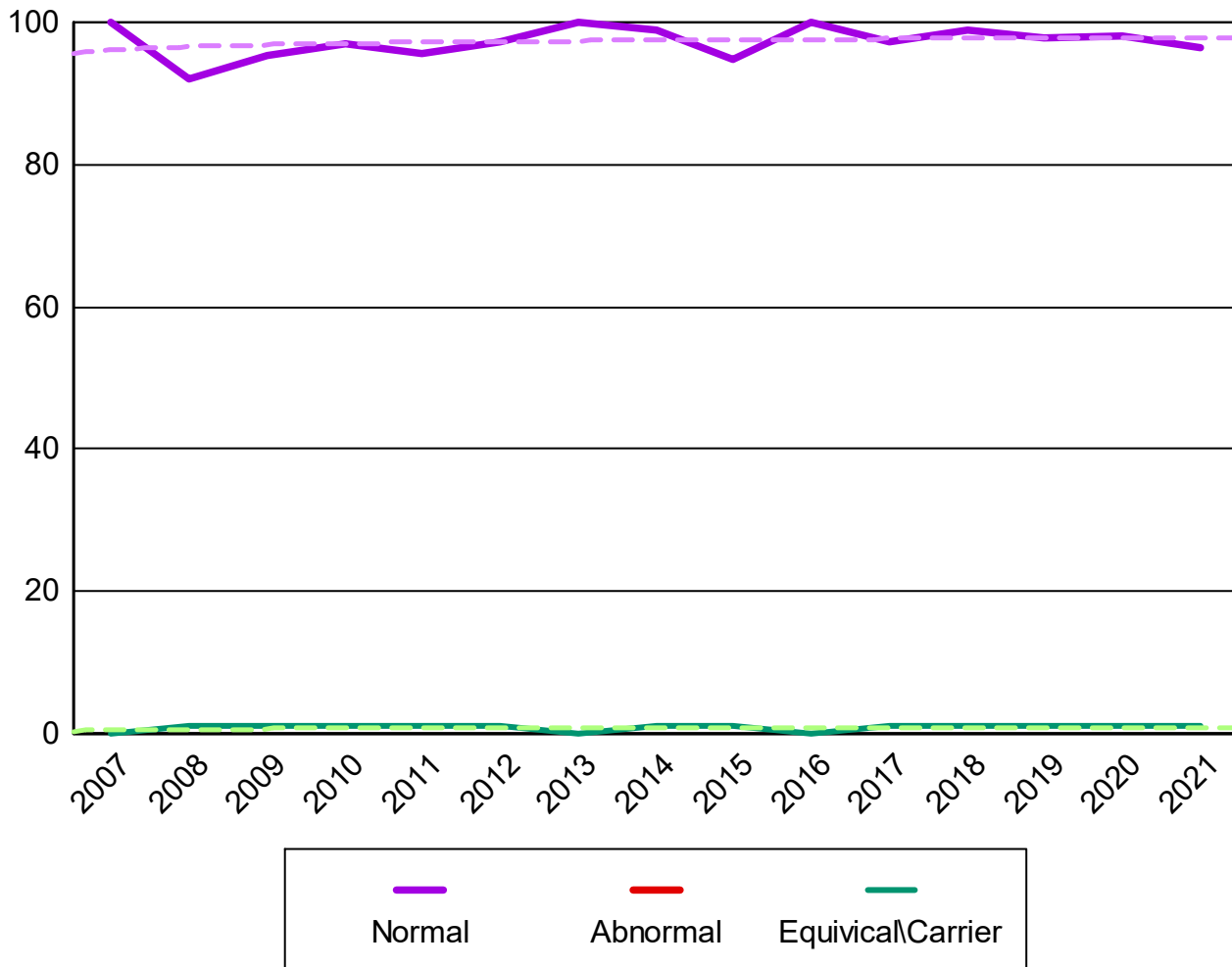
GOLDEN RETRIEVER



GOLDEN RETRIEVER

PROGRESSIVE RETINAL ATROPHY

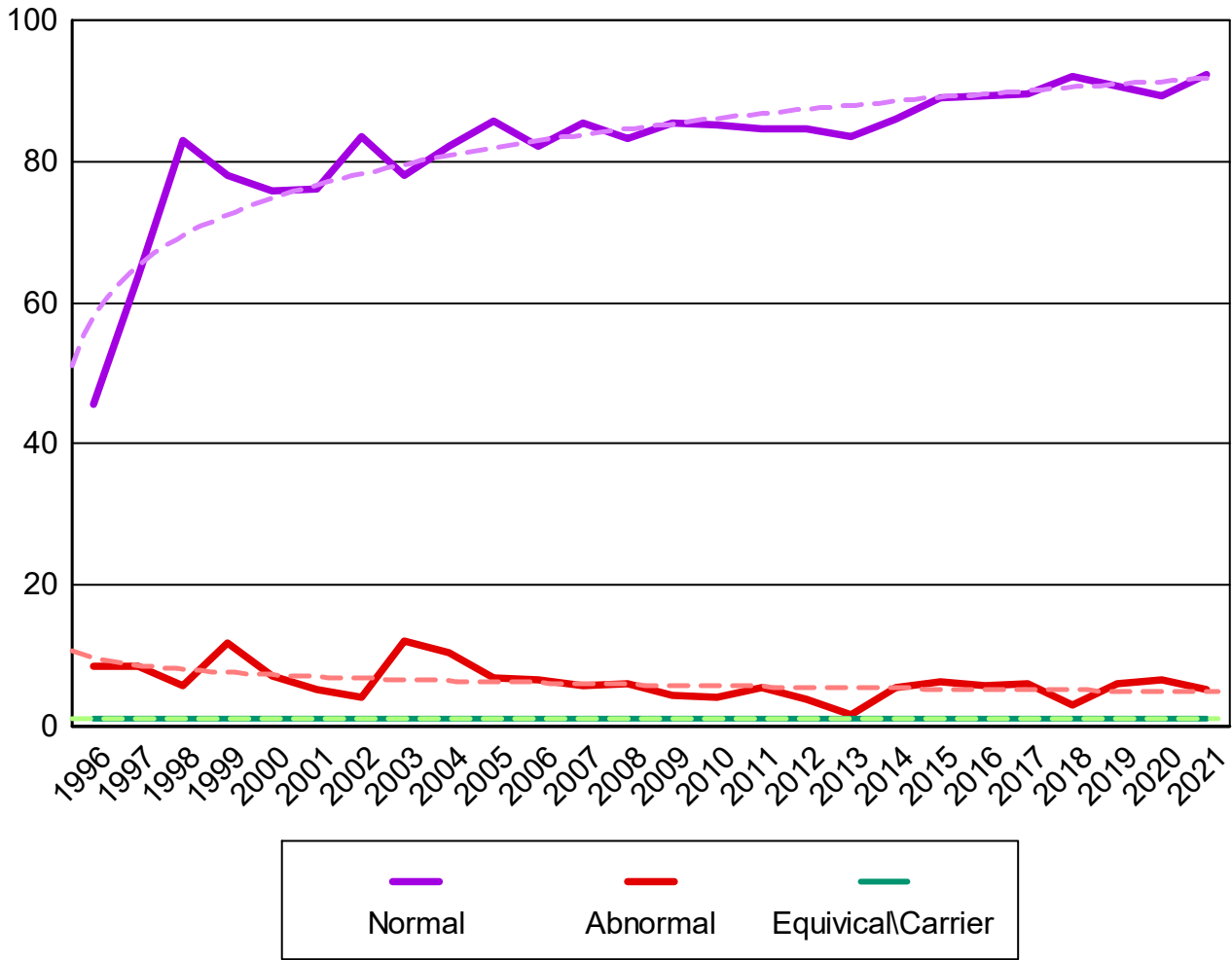
GOLDEN RETRIEVER



GOLDEN RETRIEVER

THYROID

GOLDEN RETRIEVER



**Percent submitted to the open registry**  
**Hips**

<i>Report year</i>	<i>Cases</i>	<i>Excellent</i> %	<i>Good</i> %	<i>Fair</i> %	<i>Borderline</i> %	<i>Mild</i> %	<i>Moderate</i> %	<i>Severe</i> %
1974	513	20 3.90%	221 43.08%	148 28.85%	2 0.39%	81 15.79%	35 6.82%	6 1.17%
1975	896	31 3.46%	423 47.21%	247 27.57%	2 0.22%	123 13.73%	62 6.92%	8 0.89%
1976	1,162	27 2.32%	538 46.30%	321 27.62%	2 0.17%	164 14.11%	100 8.61%	10 0.86%
1977	1,390	48 3.45%	691 49.71%	345 24.82%	1 0.07%	182 13.09%	115 8.27%	8 0.58%
1978	1,703	33 1.94%	820 48.15%	428 25.13%	9 0.53%	251 14.74%	150 8.81%	12 0.70%
1979	1,709	30 1.76%	806 47.16%	434 25.39%	27 1.58%	243 14.22%	152 8.89%	17 0.99%
1980	2,124	26 1.22%	979 46.09%	515 24.25%	98 4.61%	283 13.32%	197 9.27%	26 1.22%
1981	2,393	27 1.13%	1,128 47.14%	574 23.99%	70 2.93%	298 12.45%	260 10.87%	36 1.50%
1982	2,381	39 1.64%	1,129 47.42%	587 24.65%	84 3.53%	301 12.64%	210 8.82%	31 1.30%
1983	2,539	27 1.06%	1,226 48.29%	692 27.25%	52 2.05%	266 10.48%	241 9.49%	35 1.38%
1984	3,158	54 1.71%	1,556 49.21%	798 25.24%	58 1.83%	394 12.46%	261 8.25%	37 1.17%
1985	2,902	69 2.37%	1,406 48.35%	788 27.10%	41 1.41%	336 11.55%	239 8.22%	23 0.79%
1986	3,286	62 1.88%	1,461 44.39%	955 29.02%	61 1.85%	415 12.61%	283 8.60%	49 1.49%
1987	3,486	70 2.01%	1,547 44.34%	899 25.77%	57 1.63%	529 15.16%	343 9.83%	41 1.18%
1988	3,704	111 2.99%	1,662 44.79%	945 25.46%	65 1.75%	544 14.66%	333 8.97%	44 1.19%
1989	3,831	113 2.95%	1,769 46.12%	988 25.76%	74 1.93%	503 13.11%	328 8.55%	56 1.46%
1990	3,886	131 3.37%	1,741 44.76%	1,025 26.35%	76 1.95%	534 13.73%	334 8.59%	45 1.16%
1991	3,980	118 2.96%	1,795 45.02%	1,039 26.06%	91 2.28%	546 13.69%	338 8.48%	53 1.33%
1992	4,079	93 2.28%	1,824 44.66%	1,126 27.57%	101 2.47%	566 13.86%	325 7.96%	44 1.08%
1993	4,101	99 2.41%	2,123 51.76%	1,064 25.94%	75 1.83%	401 9.78%	295 7.19%	44 1.07%
1994	4,436	135 3.04%	2,349 52.86%	1,083 24.37%	99 2.23%	459 10.33%	278 6.26%	33 0.74%
1995	4,757	181 3.79%	2,511 52.62%	1,094 22.93%	110 2.31%	546 11.44%	279 5.85%	36 0.75%



**Percent submitted to the open registry**

**Hips**

Report year	Cases	Excellent %	Good %	Fair %	Borderline %	Mild %	Moderate %	Severe %
1996	4,852	219 4.50%	2,376 48.87%	1,263 25.98%	114 2.34%	521 10.72%	321 6.60%	38 0.78%
1997	5,377	209 3.88%	2,516 46.73%	1,482 27.53%	168 3.12%	617 11.46%	342 6.35%	43 0.80%
1998	5,139	224 4.35%	2,324 45.15%	1,412 27.43%	151 2.93%	679 13.19%	310 6.02%	39 0.76%
1999	4,920	288 5.85%	2,450 49.77%	1,193 24.23%	128 2.60%	526 10.68%	302 6.13%	33 0.67%
2000	4,681	297 6.33%	2,381 50.78%	1,093 23.31%	112 2.39%	480 10.24%	281 5.99%	37 0.79%
2001	4,612 <b>9.32%</b>	241 5.22%	2,249 48.74%	1,114 24.14%	149 3.23%	521 11.29%	291 6.31%	47 1.02%
2002	4,739 <b>14.20%</b>	195 4.11%	2,451 51.63%	1,155 24.33%	180 3.79%	507 10.68%	241 5.08%	10 0.21%
2003	4,195 <b>14.82%</b>	191 4.55%	2,129 50.73%	1,109 26.42%	76 1.81%	489 11.65%	181 4.31%	20 0.48%
2004	4,468 <b>17.19%</b>	217 4.86%	2,300 51.48%	1,113 24.91%	87 1.95%	529 11.84%	198 4.43%	24 0.54%
2005	4,280 <b>19.56%</b>	207 4.84%	2,250 52.57%	1,009 23.57%	88 2.06%	514 12.01%	195 4.56%	17 0.40%
2006	4,060 <b>20.32%</b>	215 5.30%	2,100 51.72%	930 22.91%	61 1.50%	537 13.23%	196 4.83%	21 0.52%
2007	3,658 <b>20.36%</b>	234 6.39%	1,805 49.32%	841 22.98%	64 1.75%	532 14.54%	163 4.45%	19 0.52%
2008	3,547 <b>18.69%</b>	272 7.67%	1,790 50.47%	809 22.81%	56 1.58%	461 13.00%	151 4.26%	8 0.23%
2009	3,184 <b>18.44%</b>	254 7.98%	1,657 52.04%	705 22.14%	53 1.66%	402 12.63%	108 3.39%	5 0.16%
2010	3,016 <b>18.87%</b>	268 8.89%	1,590 52.72%	618 20.49%	53 1.76%	404 13.40%	76 2.52%	7 0.23%
2011	3,033 <b>20.49%</b>	280 9.23%	1,672 55.09%	566 18.65%	47 1.55%	365 12.03%	93 3.06%	10 0.33%
2012	3,074 <b>18.74%</b>	271 8.80%	1,748 56.77%	562 18.25%	52 1.69%	335 10.88%	99 3.22%	7 0.23%
2013	3,025 <b>16.33%</b>	253 8.36%	1,709 56.50%	582 19.24%	48 1.59%	349 11.54%	74 2.45%	10 0.33%
2014	3,002 <b>14.52%</b>	262 8.72%	1,809 60.24%	493 16.42%	31 1.03%	321 10.69%	82 2.73%	4 0.13%
2015	3,344 <b>19.37%</b>	293 8.76%	1,970 58.89%	538 16.08%	39 1.17%	383 11.45%	103 3.08%	18 0.54%
2016	3,423 <b>19.89%</b>	264 7.71%	2,028 59.25%	561 16.39%	43 1.26%	390 11.39%	131 3.83%	6 0.18%
2017	3,671 <b>18.73%</b>	327 8.90%	2,048 55.76%	649 17.67%	46 1.25%	455 12.39%	127 3.46%	19 0.52%
2018	4,228 <b>20.70%</b>	365 8.63%	2,347 55.47%	738 17.44%	47 1.11%	546 12.90%	174 4.11%	11 0.26%

**Percent submitted to the open registry**

**Hips**

<i>Report year</i>	<i>Cases</i>	<i>Excellent</i> %	<i>Good</i> %	<i>Fair</i> %	<i>Borderline</i> %	<i>Mild</i> %	<i>Moderate</i> %	<i>Severe</i> %
2019	4,320	443	2,376	678	52	610	155	6
	<b>20.82%</b>	10.25%	54.97%	15.69%	1.20%	14.11%	3.59%	0.14%
2020	4,636	498	2,554	712	63	622	172	15
	<b>21.71%</b>	10.74%	55.07%	15.35%	1.36%	13.41%	3.71%	0.32%
2021	5,165	521	2,802	821	104	674	219	24
	<b>23.08%</b>	10.07%	54.17%	15.87%	2.01%	13.03%	4.23%	0.46%
<b>Totals</b>	<b>168,065</b>	<b>8,852</b>	<b>85,136</b>	<b>38,841</b>	<b>3,367</b>	<b>20,734</b>	<b>9,943</b>	<b>1,192</b>
		<b>5.26%</b>	<b>50.61%</b>	<b>23.09%</b>	<b>2.00%</b>	<b>12.33%</b>	<b>5.91%</b>	<b>0.71%</b>

**Elbow**

<i>Report Year</i>	<i>Cases</i>	<i>Normal</i> %	<i>Grade 1</i> %	<i>Grade 2</i> %	<i>Grade 3</i> %	<i>Borderline</i> %
1989	1	1 100.00%				
1990	25	22 88.00%	2 8.00%	1 4.00%		
1991	43	41 95.35%	1 2.33%		1 2.33%	
1992	108	96 88.89%	6 5.56%	4 3.70%	1 0.93%	1 0.93%
1993	171	156 91.23%	11 6.43%	1 0.58%	2 1.17%	1 0.58%
1994	267	240 89.89%	24 8.99%	2 0.75%		1 0.37%
1995	291	260 89.35%	18 6.19%	8 2.75%	3 1.03%	2 0.69%
1996	437	378 86.50%	42 9.61%	11 2.52%	2 0.46%	4 0.92%
1997	519	443 85.36%	54 10.40%	11 2.12%	6 1.16%	5 0.96%
1998	706	616 87.25%	69 9.77%	11 1.56%	8 1.13%	2 0.28%
1999	767	693 90.35%	47 6.13%	15 1.96%	7 0.91%	5 0.65%
2000	1,121	978 87.24%	108 9.63%	22 1.96%	7 0.62%	6 0.54%
2001	1,447	1,273 87.98%	127 8.78%	33 2.28%	13 0.90%	1 0.07%
2002	1,886	1,643 87.12%	195 10.34%	33 1.75%	13 0.69%	2 0.11%
2003	1,863	1,644 88.24%	173 9.29%	36 1.93%	9 0.48%	1 0.05%
2004	2,313	2,050 88.63%	209 9.04%	45 1.95%	7 0.30%	2 0.09%
2005	2,351	2,084 88.64%	207 8.80%	46 1.96%	14 0.60%	
2006	2,461	2,188 88.91%	210 8.53%	51 2.07%	10 0.41%	2 0.08%
2007	2,485	2,222 89.42%	225 9.05%	28 1.13%	6 0.24%	4 0.16%
2008	2,483	2,180 87.80%	243 9.79%	51 2.05%	6 0.24%	3 0.12%
2009	2,386	2,163 90.65%	176 7.38%	35 1.47%	7 0.29%	5 0.21%

**Elbow**

<i>Report Year</i>	<i>Cases</i>	<i>Normal %</i>	<i>Grade 1 %</i>	<i>Grade 2 %</i>	<i>Grade 3 %</i>	<i>Borderline %</i>
2010	2,349	2,110 89.83%	180 7.66%	47 2.00%	12 0.51%	
2011	2,448	2,208 90.20%	180 7.35%	45 1.84%	11 0.45%	4 0.16%
2012	2,577	2,290 88.86%	220 8.54%	48 1.86%	15 0.58%	4 0.16%
2013	2,547	2,262 88.81%	204 8.01%	57 2.24%	20 0.79%	4 0.16%
2014	2,581	2,312 89.58%	184 7.13%	63 2.44%	14 0.54%	8 0.31%
2015	2,923	2,635 90.15%	218 7.46%	51 1.74%	16 0.55%	3 0.10%
2016	3,019	2,643 87.55%	261 8.65%	94 3.11%	17 0.56%	4 0.13%
2017	3,291	2,843 86.39%	333 10.12%	86 2.61%	27 0.82%	2 0.06%
2018	3,846	3,368 87.57%	351 9.13%	97 2.52%	26 0.68%	4 0.10%
2019	3,946	3,425 86.80%	382 9.68%	107 2.71%	29 0.73%	3 0.08%
2020	4,331	3,791 87.53%	423 9.77%	96 2.22%	18 0.42%	3 0.07%
2021	4,809	4,181 86.94%	487 10.13%	114 2.37%	22 0.46%	5 0.10%
<b>Totals</b>	<b>62,798</b>	<b>55,439</b> <b>88.28%</b>	<b>5,570</b> <b>8.87%</b>	<b>1,349</b> <b>2.15%</b>	<b>349</b> <b>0.56%</b>	<b>91</b> <b>0.14%</b>

### Advanced Cardiac

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
<b>Golden Retriever</b>							
2016	577	570	98.8	3	0.5	4	0.7
2017	1274	1254	98.4	6	0.5	14	1.1
2018	1707	1681	98.5	9	0.5	17	1.0
2019	1724	1694	98.3	12	0.7	18	1.0
2020	1336	1315	98.4	4	0.3	17	1.3
2021	1332	1301	97.7	14	1.1	17	1.3
<b>Totals</b>	<b>7950</b>	<b>7815</b>	<b>98.3</b>	<b>48</b>	<b>0.6</b>	<b>87</b>	<b>1.1</b>

### Agouti

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Baer Hearing Test

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
<b>Golden Retriever</b>							
2015	2	2	100.0				
2017	2	2	100.0				
2020	1	1	100.0				
2021	2	2	100.0				
<b>Totals</b>	<b>7</b>	<b>7</b>	<b>100.0</b>				

### Brown (Typr 1)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Canine Multifocal Retinopathy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Cataracts

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
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### Cataracts

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2014	1	1	100.0				
2015	4	4	100.0				
2021	1	1	100.0				
<b>Totals</b>	<b>6</b>	<b>6</b>	<b>100.0</b>				

### Chondrodysplasia (Cdpa)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	2	2	100.0				
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>100.0</b>				

### Chondrodystrophy (Cddy)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	6	6	100.0				
<b>Totals</b>	<b>6</b>	<b>6</b>	<b>100.0</b>				

### Congenital Cardiac

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
<b>Golden Retriever</b>							
1996	368	360	97.8	3	0.8	5	1.4
1997	565	557	98.6	2	0.4	6	1.1
1998	722	709	98.2	3	0.4	10	1.4
1999	794	779	98.1	8	1.0	7	0.9
2000	890	882	99.1	3	0.3	5	0.6
2001	1026	1016	99.0	4	0.4	6	0.6
2002	1228	1212	98.7	6	0.5	10	0.8
2003	1478	1466	99.2	2	0.1	10	0.7
2004	1656	1638	98.9	8	0.5	10	0.6
2005	1720	1706	99.2	10	0.6	4	0.2
2006	1790	1772	99.0	5	0.3	13	0.7
2007	1785	1770	99.2	6	0.3	9	0.5
2008	1860	1850	99.5	6	0.3	4	0.2
2009	1965	1954	99.4	3	0.2	8	0.4
2010	1780	1766	99.2	3	0.2	11	0.6
2011	2208	2198	99.6	3	0.1	7	0.3
2012	1952	1939	99.3	6	0.3	7	0.4
2013	2108	2095	99.4	6	0.3	7	0.3
2014	2239	2228	99.5	4	0.2	7	0.3
2015	2386	2360	98.9	4	0.2	22	0.9
2016	1841	1824	99.1	6	0.3	11	0.6
2017	1339	1322	98.7	2	0.2	15	1.1
2018	1479	1475	99.7			4	0.3

### Congenital Cardiac

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
2019	1567	1562	99.7			5	0.3
2020	1301	1297	99.7	1	0.1	3	0.2
2021	118	117	99.2	1	0.9		
<b>Totals</b>	<b>38165</b>	<b>37854</b>	<b>99.2</b>	<b>105</b>	<b>0.3</b>	<b>206</b>	<b>0.5</b>

### D Locus

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>
<b>Golden Retriever</b>					
2017	1	1	100.0		
2019	2	2	100.0		
2020	1	1	100.0		
2021	7	7	100.0		
<b>Totals</b>	<b>11</b>	<b>11</b>	<b>100.0</b>		

### Degenerative Encephalopathy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2017	3	3	100.0				
2020	1	1	100.0				
<b>Totals</b>	<b>4</b>	<b>4</b>	<b>100.0</b>				

### Degenerative Myelopathy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2008	2	2	100.0				
2009	3	3	100.0				
2010	17	17	100.0				
2011	30	30	100.0				
2012	39	37	94.9	1	2.6	1	2.6
2013	55	52	94.6	1	1.8	2	3.6
2014	39	37	94.9	2	5.1		
2015	64	63	98.4			1	1.6
2016	141	140	99.3	1	0.7		
2017	178	177	99.4	1	0.6		
2018	196	194	99.0	2	1.0		
2019	276	275	99.6			1	0.4
2020	357	354	99.2	2	0.6	1	0.3
2021	499	499	100.0				
<b>Totals</b>	<b>1896</b>	<b>1880</b>	<b>99.2</b>	<b>10</b>	<b>0.5</b>	<b>6</b>	<b>0.3</b>

### Degenerative Myelopathy B

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2015	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Dentition Database

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2012	120	119	99.2	1	0.8		
2013	103	102	99.0	1	1.0		
2014	85	85	100.0				
2015	104	103	99.0	1	1.0		
2016	129	126	97.7	3	2.3		
2017	124	117	94.4	7	5.7		
2018	161	154	95.7	7	4.4		
2019	172	167	97.1	5	2.9		
2020	142	134	94.4	8	5.6		
2021	228	222	97.4	6	2.6		
<b>Totals</b>	<b>1368</b>	<b>1329</b>	<b>97.2</b>	<b>39</b>	<b>2.9</b>		

### Dilated Cardiomyopathy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2018	6	6	100.0				
<b>Totals</b>	<b>6</b>	<b>6</b>	<b>100.0</b>				

### Dominant Black

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Exercise Induced Collapse

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2012	1	1	100.0				
2013	1	1	100.0				
2014	1	1	100.0				
2018	15	15	100.0				
2021	12	12	100.0				
<b>Totals</b>	<b>30</b>	<b>30</b>	<b>100.0</b>				



## Eyes

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Breeder opt.</i>	<i>% Breeder opt.</i>
<b>Golden Retriever</b>							
2012	299	223	74.6	3	1.0	73	24.4
2013	3389	2492	73.5	55	1.6	842	24.9
2014	4397	3225	73.4	79	1.8	1093	24.9
2015	5021	3638	72.5	123	2.5	1260	25.1
2016	4898	3573	73.0	87	1.8	1238	25.3
2017	5392	4004	74.3	80	1.5	1308	24.3
2018	5592	4056	72.5	109	2.0	1427	25.5
2019	6096	4504	73.9	142	2.3	1450	23.8
2020	5689	4284	75.3	100	1.8	1305	22.9
2021	7267	5449	75.0	144	2.0	1674	23.0
<b>Totals</b>	<b>48040</b>	<b>35448</b>	<b>73.8</b>	<b>922</b>	<b>1.9</b>	<b>11670</b>	<b>24.3</b>

## Gm2-Gangliosidosis

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2019	1	1	100.0				
2021	1	1	100.0				
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>100.0</b>				

## Golden Retriever Neuronal Ceroid Lipofuscinosis (Ncl)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2019	2199	2083	94.7	9	0.4	107	4.9
2020	485	473	97.5	1	0.2	11	2.3
2021	475	466	98.1			9	1.9
<b>Totals</b>	<b>3159</b>	<b>3022</b>	<b>95.7</b>	<b>10</b>	<b>0.3</b>	<b>127</b>	<b>4.0</b>

## Gr1 Progressive Retinal Atrophy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2011	38	36	94.7			2	5.3
2012	66	65	98.5			1	1.5
2013	71	68	95.8			3	4.2
2014	103	102	99.0			1	1.0
2015	145	141	97.2			4	2.8
2016	191	190	99.5			1	0.5
2017	241	235	97.5			6	2.5
2018	198	193	97.5			5	2.5
2019	265	262	98.9			3	1.1
2020	337	334	99.1			3	0.9
2021	500	490	98.0			10	2.0
<b>Totals</b>	<b>2155</b>	<b>2116</b>	<b>98.2</b>			<b>39</b>	<b>1.8</b>

### Gr2 Progressive Retinal Atrophy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2013	30	29	96.7			1	3.3
2014	103	100	97.1			3	2.9
2015	121	115	95.0			6	5.0
2016	182	181	99.5			1	0.6
2017	241	230	95.4			11	4.6
2018	218	213	97.7			5	2.3
2019	256	246	96.1			10	3.9
2020	337	319	94.7			18	5.3
2021	502	490	97.6			12	2.4
<b>Totals</b>	<b>1990</b>	<b>1923</b>	<b>96.6</b>			<b>67</b>	<b>3.4</b>

### Hyperuricosuria

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2012	1	1	100.0				
2015	1	1	100.0				
2016	1	1	100.0				
2021	1	1	100.0				
<b>Totals</b>	<b>4</b>	<b>4</b>	<b>100.0</b>				

### Ichthyosis

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2011	19	15	79.0			4	21.1
2012	85	63	74.1	1	1.2	21	24.7
2013	88	61	69.3	1	1.1	26	29.6
2014	116	77	66.4	7	6.0	32	27.6
2015	150	106	70.7	2	1.3	42	28.0
2016	211	158	74.9	1	0.5	52	24.6
2017	254	194	76.4	6	2.4	54	21.3
2018	242	179	74.0	6	2.5	57	23.6
2019	264	197	74.6	6	2.3	61	23.1
2020	342	242	70.8	4	1.2	96	28.1
2021	505	365	72.3	10	2.0	130	25.7
<b>Totals</b>	<b>2276</b>	<b>1657</b>	<b>72.8</b>	<b>44</b>	<b>1.9</b>	<b>575</b>	<b>25.3</b>

### Ichthyosis Ich2

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	62	62	100.0				
<b>Totals</b>	<b>62</b>	<b>62</b>	<b>100.0</b>				

### Kidney

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2020	2	2	100.0				
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>100.0</b>				

### Legg-Calve-Perthes

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2007	4	4	100.0				
2008	1	1	100.0				
2009	4	4	100.0				
2010	18	18	100.0				
2011	13	13	100.0				
2012	40	40	100.0				
2013	48	48	100.0				
2014	22	22	100.0				
2015	29	29	100.0				
2016	28	28	100.0				
2017	24	24	100.0				
2018	33	33	100.0				
2019	42	42	100.0				
2020	59	59	100.0				
2021	23	23	100.0				
<b>Totals</b>	<b>388</b>	<b>388</b>	<b>100.0</b>				

### Mcr1 (Elocus)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Multiple Drug Resistance (Mdr1)

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2018	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Muscular Dystrophy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2017	26	26	100.0				
2018	56	56	100.0				

### Muscular Dystrophy

Report year	Cases	Normal	% Normal	Abnormal	% Abnormal	Carrier	% Carrier
2019	135	135	100.0				
2020	222	222	100.0				
2021	289	289	100.0				
<b>Totals</b>	<b>728</b>	<b>728</b>	<b>100.0</b>				

### Neonatal Encephalopathy W/Seizures

Report year	Cases	Normal	% Normal	Abnormal	% Abnormal	Carrier	% Carrier
2020	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Neuronal Ceroid Lipofuscinosis

Report year	Cases	Normal	% Normal	Abnormal	% Abnormal	Carrier	% Carrier
2020	5	5	100.0				
2021	2	1	50.0			1	50.0
<b>Totals</b>	<b>7</b>	<b>6</b>	<b>85.7</b>			<b>1</b>	<b>14.3</b>

### Patella

Report year	Cases	Normal	% Normal	Abnormal	% Abnormal	Equivocal	% Equivocal
1995	1	1	100.0				
1996	1			1	100.0		
1997	4	3	75.0	1	25.0		
1998	3	2	66.7	1	33.3		
1999	5	4	80.0	1	20.0		
2000	5	5	100.0				
2001	4	4	100.0				
2002	13	12	92.3	1	7.7		
2003	11	11	100.0				
2004	23	23	100.0				
2005	27	25	92.6	2	7.4		
2006	37	36	97.3	1	2.7		
2007	55	55	100.0				
2008	85	84	98.8	1	1.2		
2009	57	57	100.0				
2010	53	52	98.1	1	1.9		
2011	64	64	100.0				
2012	89	89	100.0				
2013	166	165	99.4	1	0.6		
2014	129	129	100.0				
2015	130	130	100.0				
2016	211	211	100.0				
2017	203	201	99.0	2	1.0		

**Patella**

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
2018	315	314	99.7	1	0.3		
2019	299	297	99.3	2	0.7		
2020	346	345	99.7	1	0.3		
2021	396	396	100.0				
<b>Totals</b>	<b>2732</b>	<b>2715</b>	<b>99.4</b>	<b>17</b>	<b>0.6</b>		

**Progressive Retinal Atrophy**

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2007	7	7	100.0				
2008	76	70	92.1			6	7.9
2009	44	42	95.5			2	4.6
2010	34	33	97.1			1	2.9
2011	47	45	95.7			2	4.3
2012	72	70	97.2	1	1.4	1	1.4
2013	58	58	100.0				
2014	93	92	98.9			1	1.1
2015	79	75	94.9			4	5.1
2016	146	146	100.0				
2017	233	227	97.4			6	2.6
2018	208	206	99.0			2	1.0
2019	246	241	98.0			5	2.0
2020	333	327	98.2			6	1.8
2021	498	480	96.4			18	3.6
<b>Totals</b>	<b>2174</b>	<b>2119</b>	<b>97.5</b>	<b>1</b>	<b>0.1</b>	<b>54</b>	<b>2.5</b>

**Progressive Retinal Atrophy 3**

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2016	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

**Rcd4 Progressive Retinal Atrophy**

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2019	2	2	100.0				
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>100.0</b>				

**Retinal Dysplasia /Osd**

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							

### Retinal Dysplasia /Osd

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
2016	1	1	100.0				
2019	2	2	100.0				
<b>Totals</b>	<b>3</b>	<b>3</b>	<b>100.0</b>				

### Sebaceous Adenitis

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
2004	1	1	100.0				
2006	2	2	100.0				
<b>Totals</b>	<b>3</b>	<b>3</b>	<b>100.0</b>				

### Sensory Neuropathy

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
2020	22	22	100.0				
2021	97	97	100.0				
<b>Totals</b>	<b>119</b>	<b>119</b>	<b>100.0</b>				

### Serum Bile Acid

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
2020	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Shoulder

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>
1993	1	1	100.0		
2002	1	1	100.0		
2005	25	25	100.0		
2006	10	9	90.0	1	10.0
2007	15	15	100.0		
2008	13	13	100.0		
2009	15	15	100.0		
2010	22	22	100.0		
2011	16	15	93.8	1	6.3
2012	17	16	94.1	1	5.9
2013	29	26	89.7	3	10.3
2014	22	21	95.5	1	4.6
2015	22	22	100.0		
2016	27	27	100.0		

### Shoulder

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>
2017	20	20	100.0		
2018	39	38	97.4	1	2.6
2019	33	32	97.0	1	3.0
2020	34	33	97.1	1	2.9
2021	50	50	100.0		
<b>Totals</b>	<b>411</b>	<b>401</b>	<b>97.6</b>	<b>10</b>	<b>2.4</b>

### Skeletal Dysplasia 2

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Thyroid

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
1996	35	16	45.7	3	8.6	16	45.7
1997	47	30	63.8	4	8.5	13	27.7
1998	70	58	82.9	4	5.7	8	11.4
1999	68	53	77.9	8	11.8	7	10.3
2000	83	63	75.9	6	7.2	14	16.9
2001	75	57	76.0	4	5.3	14	18.7
2002	122	102	83.6	5	4.1	15	12.3
2003	150	117	78.0	18	12.0	15	10.0
2004	174	143	82.2	18	10.3	13	7.5
2005	259	222	85.7	18	7.0	19	7.3
2006	274	225	82.1	18	6.6	31	11.3
2007	329	281	85.4	19	5.8	29	8.8
2008	244	203	83.2	15	6.2	26	10.7
2009	276	236	85.5	12	4.4	28	10.1
2010	245	209	85.3	10	4.1	26	10.6
2011	256	217	84.8	14	5.5	25	9.8
2012	242	205	84.7	9	3.7	28	11.6
2013	238	199	83.6	4	1.7	35	14.7
2014	220	189	85.9	12	5.5	19	8.6
2015	284	253	89.1	18	6.3	13	4.6
2016	283	253	89.4	16	5.7	14	5.0
2017	270	242	89.6	16	5.9	12	4.4
2018	268	247	92.2	8	3.0	13	4.9
2019	234	212	90.6	14	6.0	8	3.4
2020	263	235	89.4	17	6.5	11	4.2
2021	348	321	92.2	18	5.2	9	2.6
<b>Totals</b>	<b>5357</b>	<b>4588</b>	<b>85.6</b>	<b>308</b>	<b>5.8</b>	<b>461</b>	<b>8.6</b>

### Tracheal Hypoplasia

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Equivocal</i>	<i>% Equivocal</i>
<b>Golden Retriever</b>							
2021	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				

### Von Willebrands

<i>Report year</i>	<i>Cases</i>	<i>Normal</i>	<i>% Normal</i>	<i>Abnormal</i>	<i>% Abnormal</i>	<i>Carrier</i>	<i>% Carrier</i>
<b>Golden Retriever</b>							
2017	1	1	100.0				
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>100.0</b>				