

Report from the Kennel Club/  
British Small Animal Veterinary Association  
Scientific Committee

Summary results of the  
Purebred Dog Health Survey  
for Labrador Retrievers

Warning: The results of this survey and particularly the breed-specific analyses should be interpreted with caution. The overall response rate was only 24% with breed-specific response rates from 4.5% to 64.7%.

## Labrador Retrievers

A total of 1775 forms were sent out and 369 were returned, representing 1341 live dogs. This breed had a 20.8% response rate (369/1775) and it represented 2.69% of all returns (369/13,741).

### Mortality data

A total of 574 deaths were reported and this represents 3.61% of all deaths reported in the survey (574/15,881). The median age at death for Labrador Retrievers was 12 years and 3 months (min = 2 months, max = 19 years) and this was higher than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for Labrador Retrievers. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Labrador Retrievers.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	179	31.2	Type unspecified (liver, mammary, unspecified)
2 Old age	132	23.0	Old age & age combinations
3 Cardiac	42	7.3	Heart failure; heart defect (unspec.); heart attack; cardiomyopathy
4 Cerebral vascular	32	5.6	Stroke or cerebral vascular accident
5 Combinations	29	5.1	
6 Hepatic	18	3.1	Chronic liver failure; liver disease unspecified
7 Trauma	18	3.1	Road traffic accident; unspecified; spinal injury
8 Musculoskeletal	17	3.0	Arthritis; hip dysplasia; OCD
9 Neurologic	17	3.0	Spinal disease unspecified; seizures; spondylitis
10 Other	16	2.8	Uncodeable
11 Unknown	11	1.9	
12 Urologic	11	1.9	Chronic kidney failure; incontinence
13 Gastrointestinal	8	1.4	Gastric dilatation/volvulus (GDV); pancreatitis; foreign body
14 Respiratory	8	1.4	Laryngeal paralysis; unspecified respiratory disease
15 Perioperative	6	1.0	
16 Endocrine	5	0.9	Cushings disease; diabetes mellitus
17 Immune mediated	5	0.9	Unspecified; AIHA
18 Poisoning	4	0.7	
19 Infection	3	0.5	Leptospirosis; viral (unspecified); chest (unspecified)
20 Internal bleeding	3	0.5	
21 Behaviour	2	0.3	Aggression; unspecified
22 Ocular	2	0.3	Blindness
23 Cardiovascular	1	0.2	Unspecified
24 Collapse	1	0.2	
25 Drowning	1	0.2	
26 Pining	1	0.2	
27 Senility	1	0.2	
28 Sudden death	1	0.2	
Total	574	100.0	

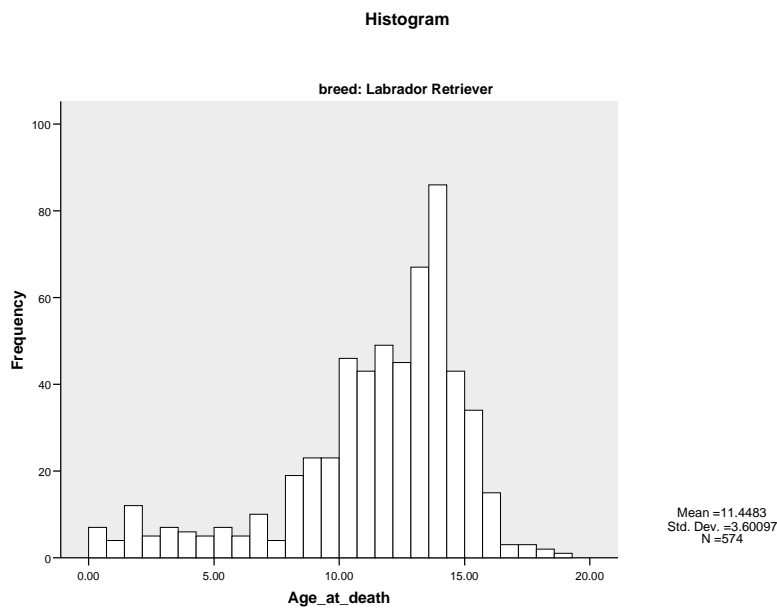


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 574 Labrador Retriever deaths with age at death reported.

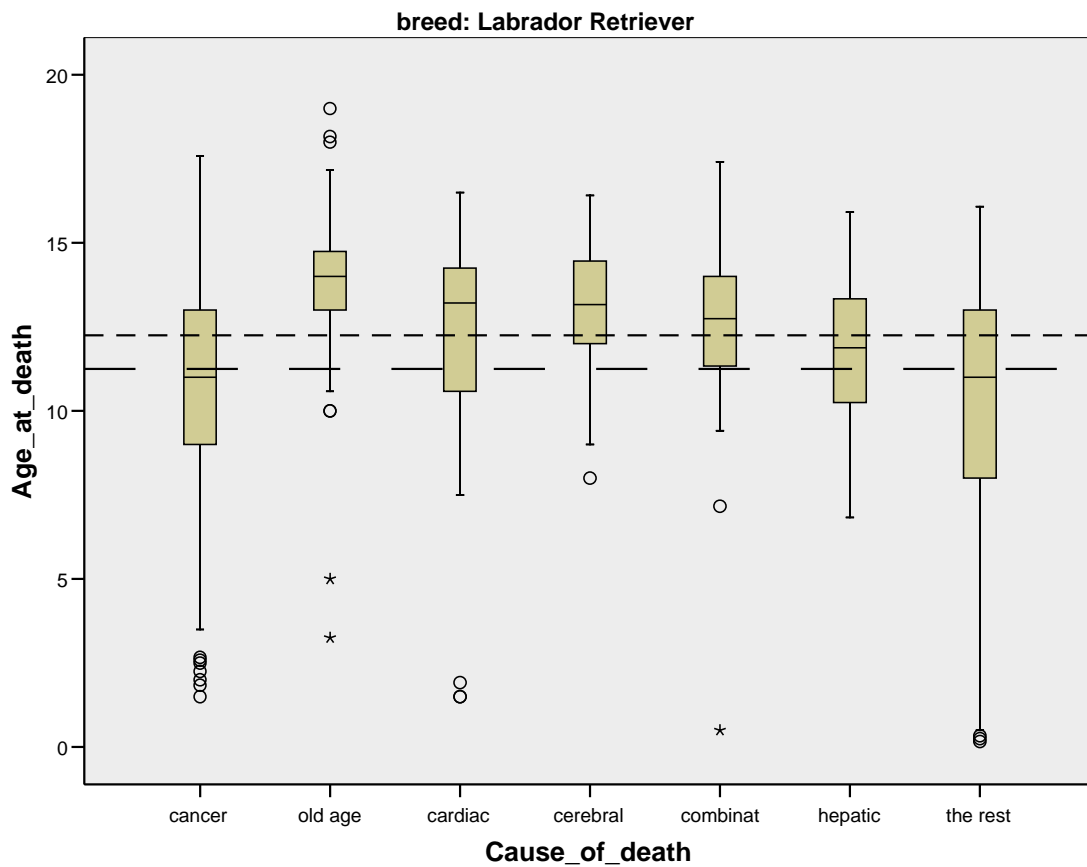


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Labrador Retrievers (N=574). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Labrador Retrievers. The solid line within each grey box represents the median age at death from the condition.

**Morbidity data**

The median current age of the 1340 live dogs with a reported age was 5 years (min=1 month, max=17 years and 9 months, Figure 3). Health information was reported for 1341 live dogs of which 902 (67%) were healthy and 439 (33%) had at least one reported health condition, resulting in a total of 676 reported conditions with a median of 1 condition/dog (min=1, max=8).

The median current age of all healthy dogs with a reported age (N=902) was 3 years and 9 months (min=1 month, max=17 years and 9 months). The distribution of gender and neuter status is shown in Table 2.

The median current age of all dogs with one or more disease conditions and a reported age (N=431) was 7 years and 5 months (min=5 months, max=16 years and 1 month). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=649) was 3 years and 6 months (min= 1 month, max= 15 years, Figure 4). Table 3 shows the disease conditions for Labrador Retrievers. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 1328 Labrador Retrievers with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	601	250	851 (64%)
Male	412	65	477 (36%)
Totals	1013 (76%)	315 (24%)	1328 (100%)

Significantly more females were neutered (P<0.0001).

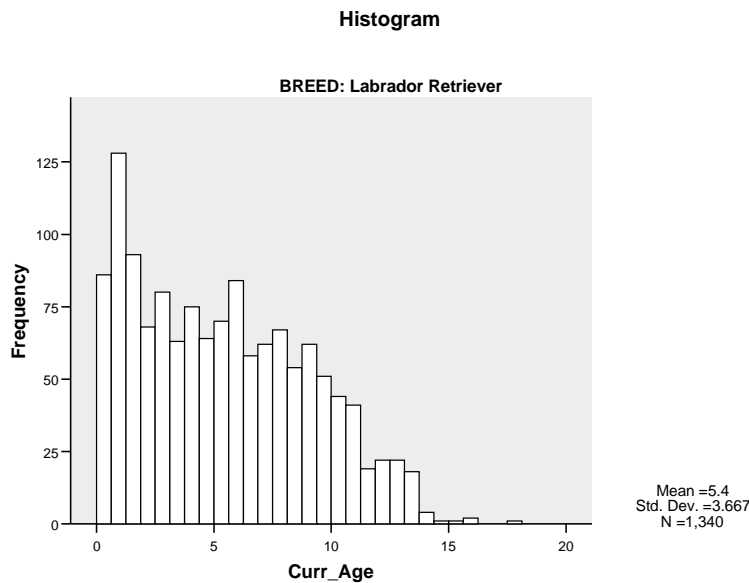


Figure 3. Histogram showing frequency of current age in years for the 1340 live Labrador Retrievers with age reported.

### Histogram

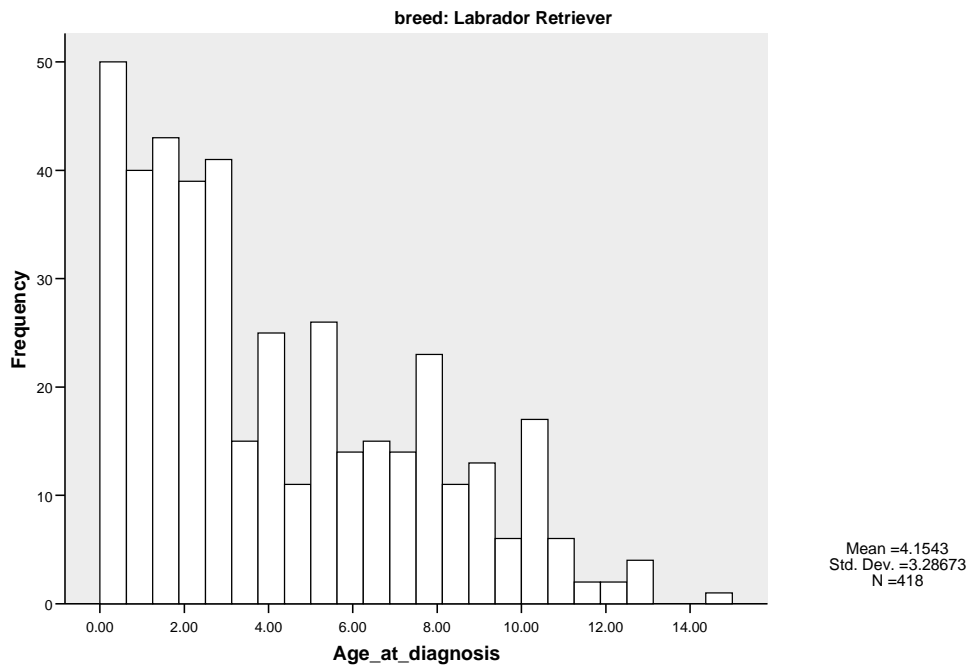


Figure 4. Histogram showing frequency of age at diagnosis for the 418 Labrador Retrievers with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

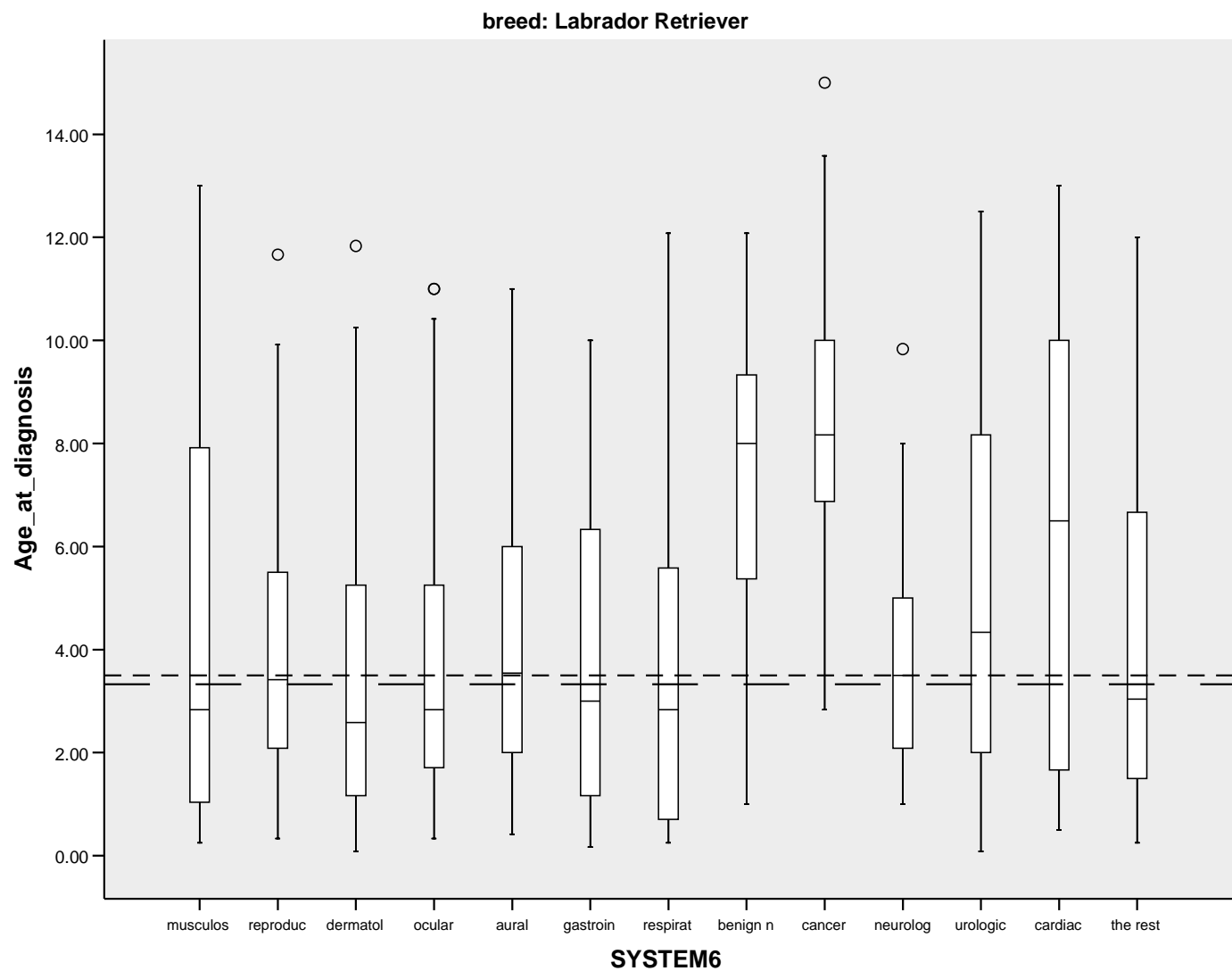


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Labrador Retrievers (N=418 dogs with 649 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Labrador Retrievers. The solid line within each grey box represents the median age at diagnosis from the condition.

Table 3. Disease conditions by organ system/category for Labrador Retrievers.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Musculoskeletal	182	26.9	Arthritis (elbows>unspecified>shoulders>rest); CLR; CHD; OCD (elbow>hock>rest)
2 Reproductive	88	13.0	Dystochia (uterine inertia>physical blockage); pyometra; infertility; false pregnancy
3 Dermatologic	56	8.3	Mites (sarcoptes>unspecified); pyotraumatic dermatitis; dermatitis
4 Ocular	48	7.1	Cataracts (unspecified>congenital); entropion; corneal FB
5 Aural	37	5.5	Otitis externa; aural haematoma; ear mites; excessive ear wax
6 Gastrointestinal	34	5.0	Colitis; vomiting & diarrhoea; GDV; gastroenteritis (unspecified>chronic); other (unspec.)
7 Respiratory	31	4.6	Kennel cough; coughing; laryngeal paralysis
8 Benign neoplasia	29	4.3	Lipoma; histiocytoma (skin); type unspecified (hock)
9 Cancer	29	4.3	Type unspecified (mammary>rest); MCT; melanoma (mouth; back); carcinoma (unspecified)
10 Neurologic	25	3.7	Seizures; IVDD (unspecified)
11 Urologic	24	3.6	Cystitis; incontinence (unspecified>after spay); cystouroliths (unspecified=struvite)
12 Immune mediated	23	3.4	Atopy; gluten-sensitive enteropathy; dust mite allergy; food allergy; AIHA
13 Cardiac	17	2.5	Heart murmur; cardiomyopathy (unspecified>dilated); arrhythmia
14 Trauma	16	2.4	Musculoskeletal (hindlimb>forelimb=head=tail); ocular; other (unspecified)
15 Endocrine	11	1.6	Hypothyroidism; unspecified; diabetes mellitus
16 Unknown	10	1.5	Undiagnosed illness
17 Dental	6	0.9	Defect other than extra teeth; dental disease; retained puppy teeth
18 Hepatic	3	0.4	Hepatitis; liver failure (chronic)
19 Anal gland	2	0.3	Anal sacculitis
20 Other	2	0.3	Uncodeable
21 Cardiopulmonary	1	0.1	Pleural effusion
22 Cerebrovascular	1	0.1	Stroke or cerebral vascular accident
23 Haematopoietic	1	0.1	Von Willebrands disease (VWD)
Total	676	100.0	

MCT=mast cell tumour