

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

Summary results of the
Purebred Dog Health Survey
for the Newfoundland breed

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%.

The Newfoundland breed

A total of 890 forms were sent out and 233 were returned, representing 506 live dogs. This breed had a 26.2% response rate (233/890) and it represented 1.70% of all returns (233/13,741).

Mortality data

A total of 269 deaths were reported and this represents 1.69% of all deaths reported in the survey (269/15,881). The median age at death for the Newfoundland breed was 9 years and 8 months (min = 5 months, max = 15 years and 10 months) and this was lower than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for the Newfoundland breed. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for the Newfoundland breed.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	73	27.1	Osteosarcoma
2 Old age	52	19.3	Old age
3 Cardiac	43	16.0	Heart failure; cardiomyopathy (dilated, unspecified)
4 Gastrointestinal	18	6.7	Gastric dilatation/volvulus (GDV); pancreatitis; unspecified
5 Combinations	11	4.1	Musculoskeletal; cardiomyopathy; CVA; cancer
6 Musculoskeletal	10	3.7	Arthritis; hip dysplasia; coxofemoral luxation
7 Other	10	3.7	Uncodeable
8 Behaviour	6	2.2	Unspecified problem; aggression
9 Neurologic	6	2.2	Seizures; paralysis; spinal (unspecified)
10 Urologic	6	2.2	Chronic kidney failure; incontinence
11 Cerebral vascular	5	1.9	Stroke or cerebral vascular accident
12 Immune mediated	4	1.5	Unspecified; AIHA and thrombocytopaenia (Evans syndrome)
13 Unknown	4	1.5	
14 Hepatic	3	1.1	Liver failure; liver disease unspecified
15 Perioperative	3	1.1	
16 Collapse	2	0.7	
17 Poisoning	2	0.7	
18 Reproductive	2	0.7	Pyometra
19 Respiratory	2	0.7	Asphyxiation; pneumonia
20 Septicaemia	2	0.7	
21 Endocrine	1	0.4	Cushings disease
22 Internal bleeding	1	0.4	
23 Pining	1	0.4	
24 Sudden death	1	0.4	
25 Trauma	1	0.4	Unspecified
Total	269	100.0	

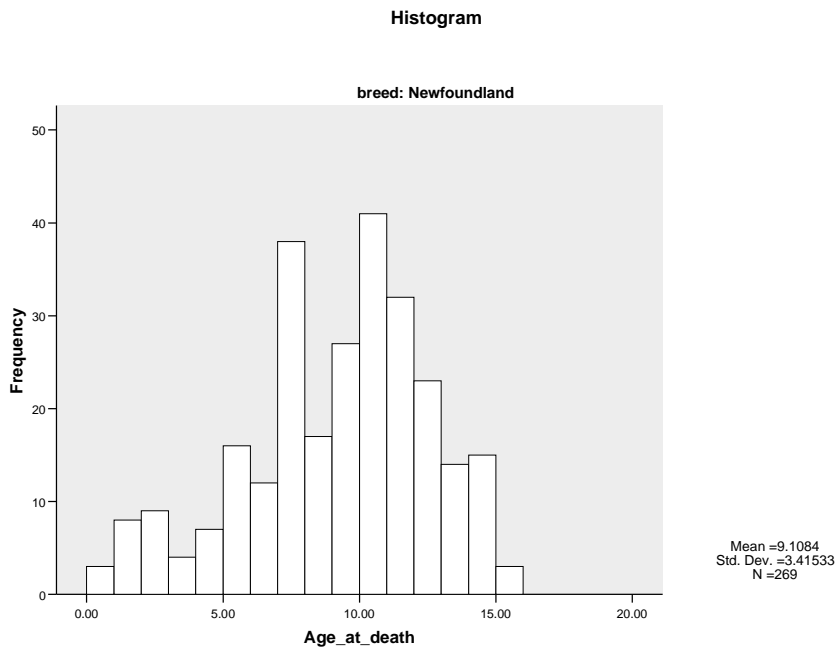


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 269 Newfoundland deaths with age at death reported.

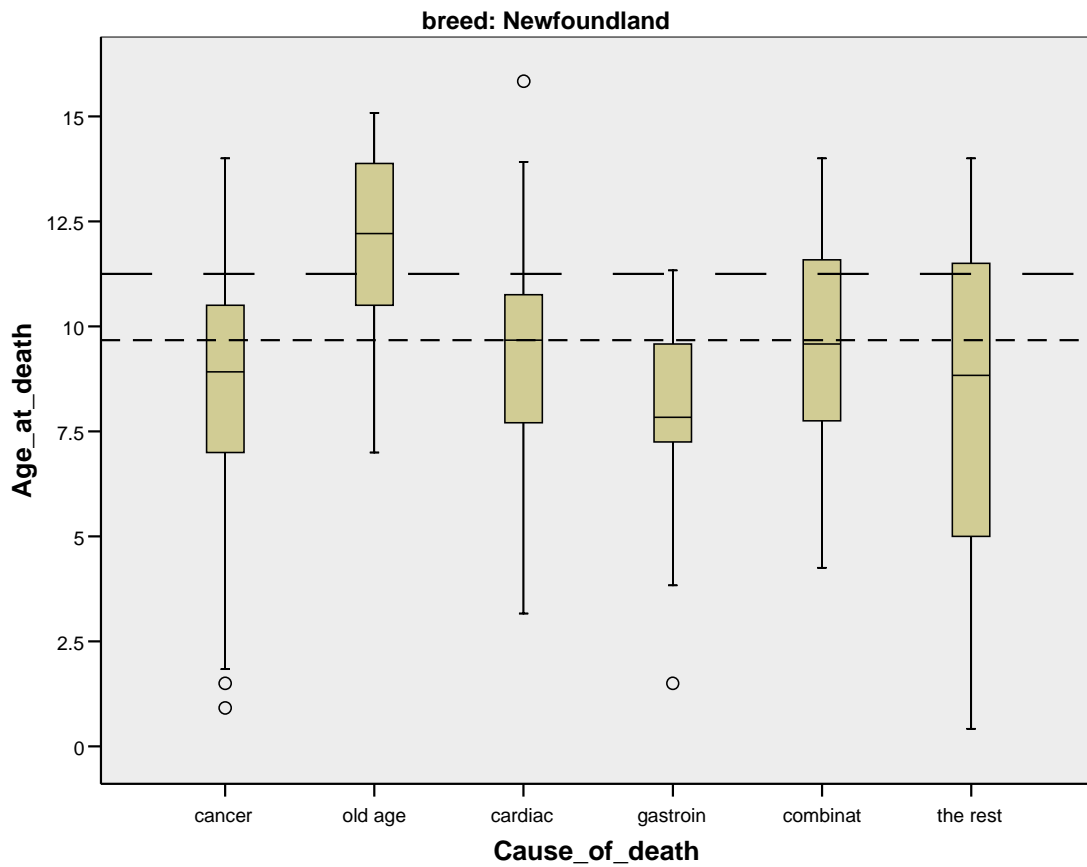


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in the Newfoundland breed (N=269). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for the Newfoundland breed. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 506 live dogs with a reported age was 4 years and 9 months (min=2 months, max=14 years and 2 months, Figure 3). Health information was reported for 506 live dogs of which 267 (53%) were healthy and 239 (47%) had at least one reported health condition, resulting in a total of 404 reported conditions with a median of 1 condition/dog (min=1, max=6).

The median current age of all healthy dogs with a reported age (N=267) was 3 years and 10 months (min=2 months, max=14 years and 2 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=231) was 5 years and 11 months (min=4 months, max=14 years and 1 month). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=391) was 2 years and 6 months (min= 1 month, max= 12 years and 3 months, Figure 4). Table 3 shows the disease conditions for the Newfoundland breed. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for the 501 Newfoundland breed with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	170	116	286 (57%)
Male	144	71	215 (43%)
Totals	314 (63%)	187 (37%)	501 (100%)

There was no association between gender and neuter status (P=0.0843).

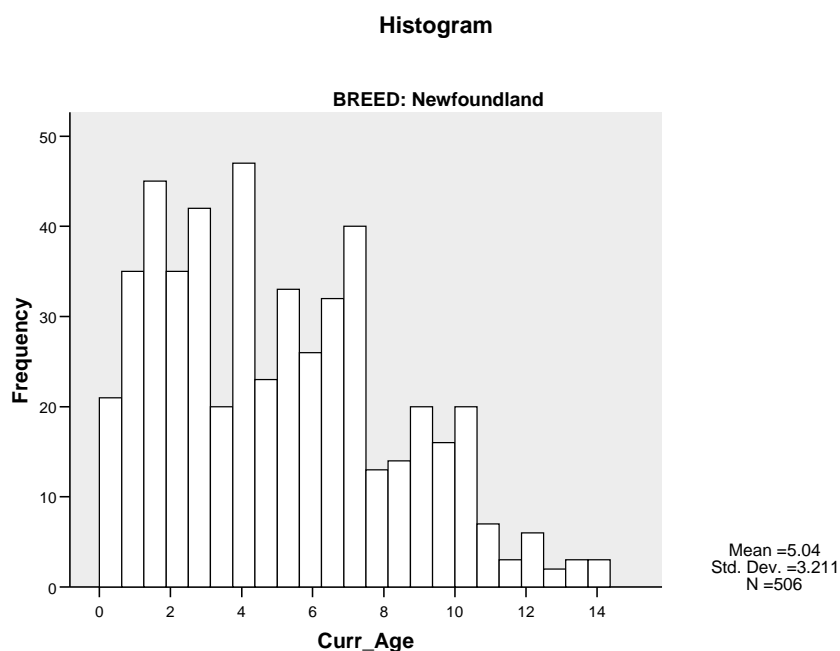


Figure 3. Histogram showing frequency of current age in years for the 506 live Newfoundland breed with age reported.

Histogram

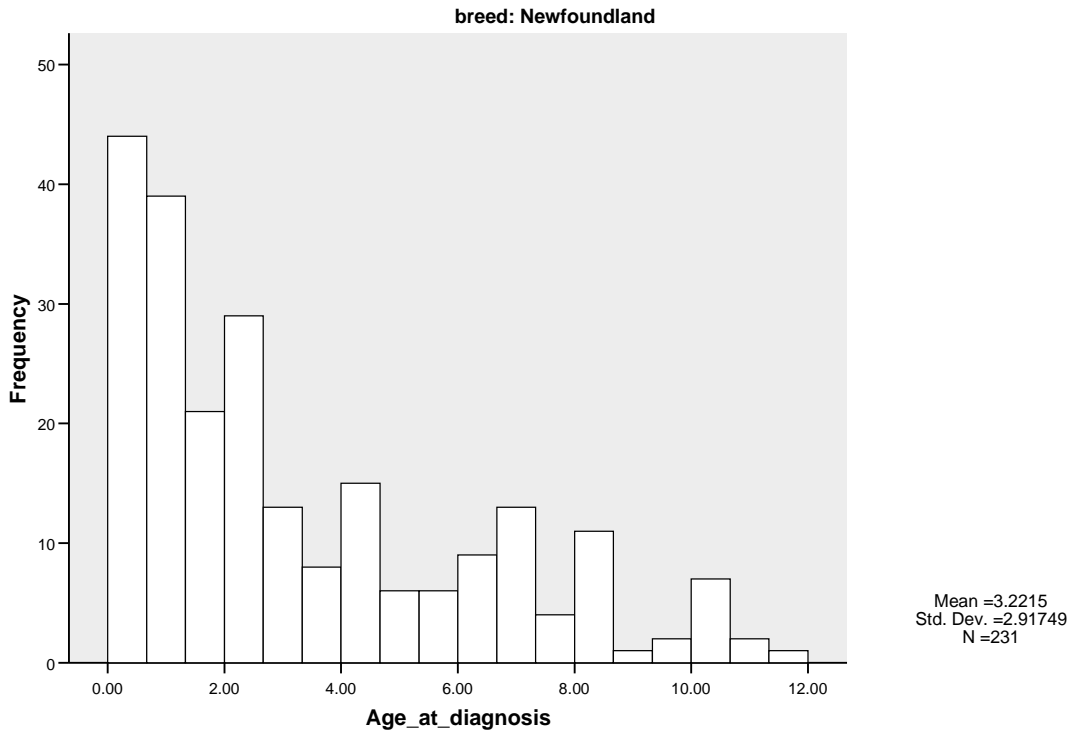


Figure 4. Histogram showing frequency of age at diagnosis for the 231 Newfoundland breed with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

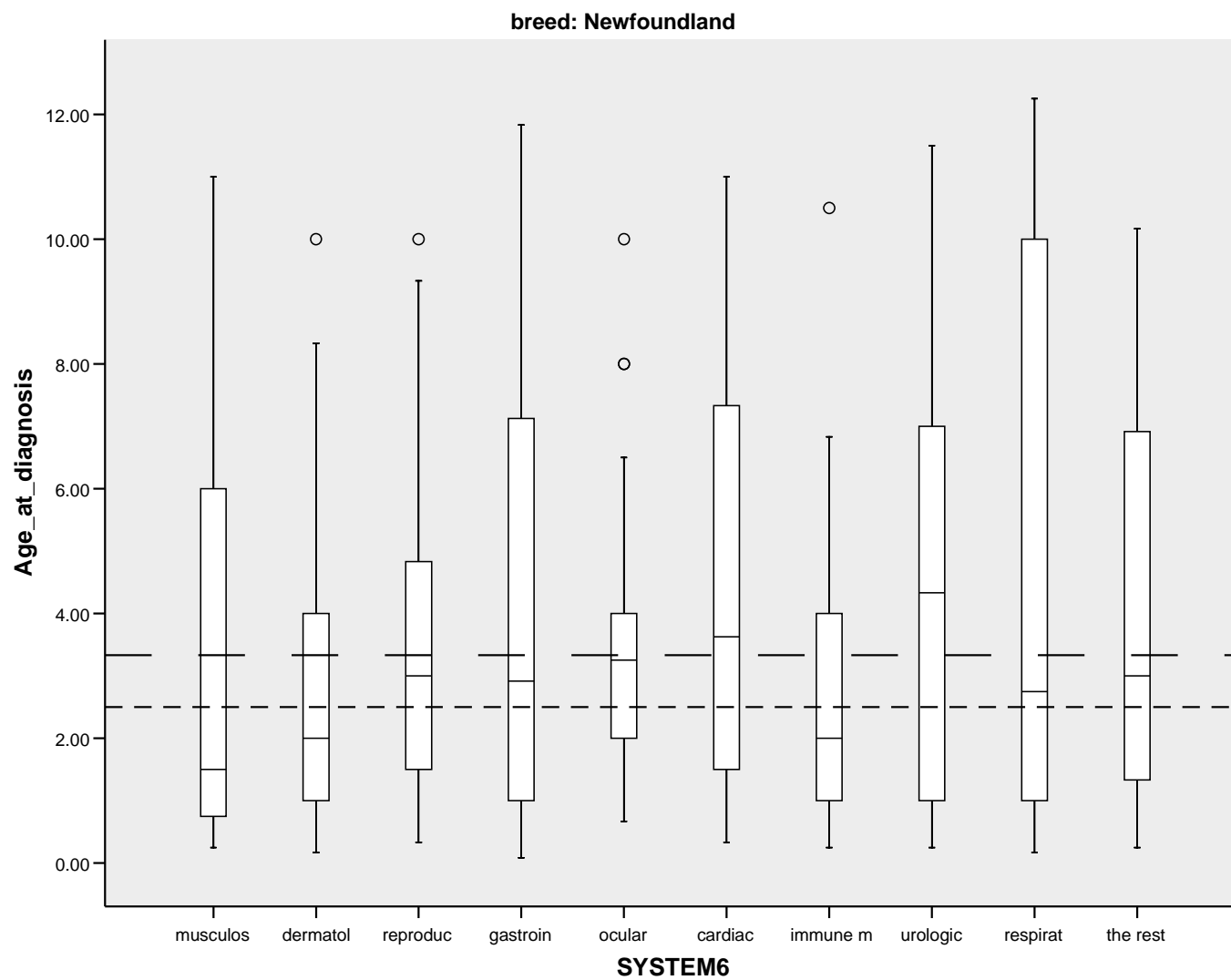


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for the Newfoundland breed (N=231 dogs with 391 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for the Newfoundland breed. 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 the Newfoundland breed.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Musculoskeletal	101	25.0	CLR; CHD; arthritis (hips=unspec>elbows>forelimb>rest); OCD (elbow=shoulder=unspec)
2 Dermatologic	61	15.1	Pyotraumatic dermatitis; dermatitis; alopecia; mites (cheyletiella>sarcoptes)
3 Reproductive	45	11.1	False pregnancy; pyometra; infertility; vaginitis
4 Gastrointestinal	27	6.7	Gastric dilatation/volvulus; diarrhoea; colitis; EPI; pancreatitis
5 Ocular	27	6.7	Entropion; KCS; cataracts; red eye
6 Cardiac	26	6.4	Heart murmur (unspec>grade 1,2>grade 3); cardiomyopathy (dilated>unspec); aortic stenosis
7 Immune mediated	24	5.9	Atopy; dust mite allergy; allergy other (unspecified); food allergy
8 Urologic	21	5.2	Cystitis; incontinence (unspecified>after spay); cystinuria; kidney disease other (unspec)
9 Aural	20	5.0	Otitis externa; aural haematoma; otitis media
10 Respiratory	17	4.2	Kennel cough; pneumonia; laryngeal paralysis
11 Unknown	9	2.2	
12 Cancer	7	1.7	Unspecified; carcinoma (toe); lymphoma; plasma cell tumour (lip)
13 Trauma	7	1.7	Musculoskeletal (forelimb>hindlimb=hind paw); neurologic (nerve); other (unspecified)
14 Neurologic	5	1.2	IVDD (lumbar); deafness; meningitis; seizures
15 Benign neoplasia	4	1.0	Lipoma
16 Endocrine	2	0.5	Cushings disease; diabetes mellitus
17 Dental	1	0.2	Defect other than extra teeth
Total	404	100.0	