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

Summary results of the Purebred Dog Health Survey for Great Danes

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%.

Great Danes

A total of 360 forms were sent out and 72 were returned, representing 225 live dogs. This breed had a 20.0% response rate (72/360) and it represented 0.52% of all returns (72/13,741).

Mortality data

A total of 171 deaths were reported and this represents 1.08% of all deaths reported in the survey (171/15,881). The median age at death for Great Danes was 6 years and 6 months (min = 4 months, max = 14 years and 2 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 Great Danes. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Great Danes.

Cause of death		N	%	Most common specific causes in descending order
1	Gastrointestinal	39	22.8	GDV; megaoesophagus; parvovirus
2	Cardiac	23	13.5	Cardiomyopathy (unspecified>dilated); heart failure
3	Cancer	21	12.3	Osteosarcoma; lymphoma; type unspecified (mammary)
4	Old age	17	9.9	Old age
5	Neurologic	12	7.0	Wobbler's syndrome; central core myopathy
6	Other	10	5.8	Uncodeable
7	Perioperative	6	3.5	
8	Combinations	5	2.9	
9	Behaviour	4	2.3	Aggression
10	Cerebral vascular	4	2.3	Stroke or cerebral vascular accident
11	Trauma	4	2.3	Unspecified; road traffic accident; spinal trauma
12	Unknown	4	2.3	
13	Hepatic	3	1.8	Chronic liver failure
14	Endocrine	2	1.2	Addison's disease; diabetes mellitus
15	Internal bleeding	2	1.2	
16	Musculoskeletal	2	1.2	Arthritis
17	Reproductive	2	1.2	Pyometra; uterine torsion
18	Urologic	2	1.2	Chronic kidney failure; protein-losing nephropathy (PLN)
19	Cardiovascular	1	0.6	Ruptured aorta
20	Dermatologic	1	0.6	Skin disease unspecified
21	Died	1	0.6	Natural causes
22	Infection	1	0.6	Kennel cough
23	Ocular	1	0.6	Blindness
24	Pining	1	0.6	
25	Poisoning	1	0.6	
26	Respiratory	1	0.6	Laryngeal paralysis
27	Septicaemia	1	0.6	
	Total	171	100.0	

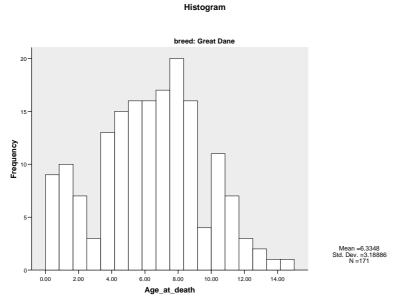


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 171 Great Dane deaths with age at death reported.

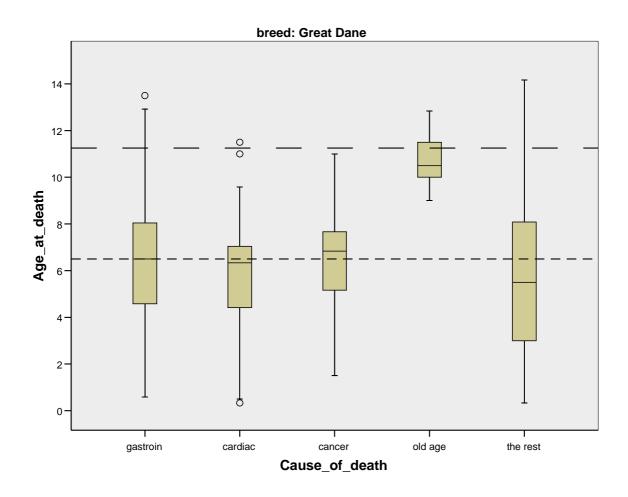


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Great Danes (N=171). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Great Danes. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 225 live dogs with a reported age was 3 years and 9 months (min=2 months, max=18 years and 2 months, Figure 3). Health information was reported for 225 live dogs of which 151 (67%) were healthy and 74 (33%) had at least one reported health condition, resulting in a total of 122 reported conditions with a median of 1 condition/dog (min=1, max=7).

The median current age of all healthy dogs with a reported age (N=151) was 3 years and 5 months (min=2 months, max=18 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=74) was 4 years and 9 months (min=8 months, max=11 years and 7 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=121) was 2 years (min= 2 months, max= 10 years and 2 months, Figure 4). Table 3 shows the disease conditions for Great Danes. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 223 Great Danes with reported gender and neuter status.

Neuter status								
Gender	Intact	Neutered	Totals					
Female 99		34	133 (60%)					
Male 68		22	90 (40%)					
Totals	167 (75%)	56 (25%)	223 (100%)					

There was no association between gender and neuter status (P=0.8500).

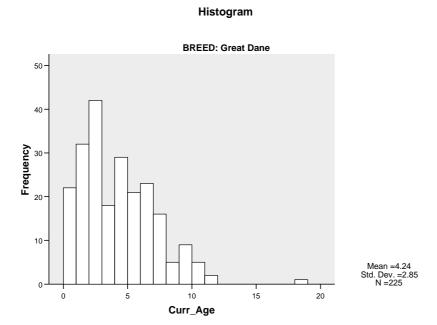


Figure 3. Histogram showing frequency of current age in years for the 225 live Great Danes with age reported.

Histogram

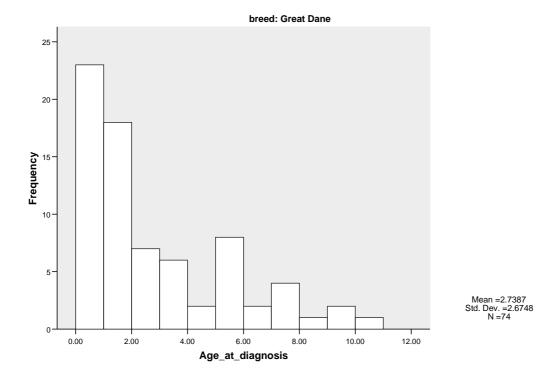


Figure 4. Histogram showing frequency of age at diagnosis for the 74 Great Danes with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

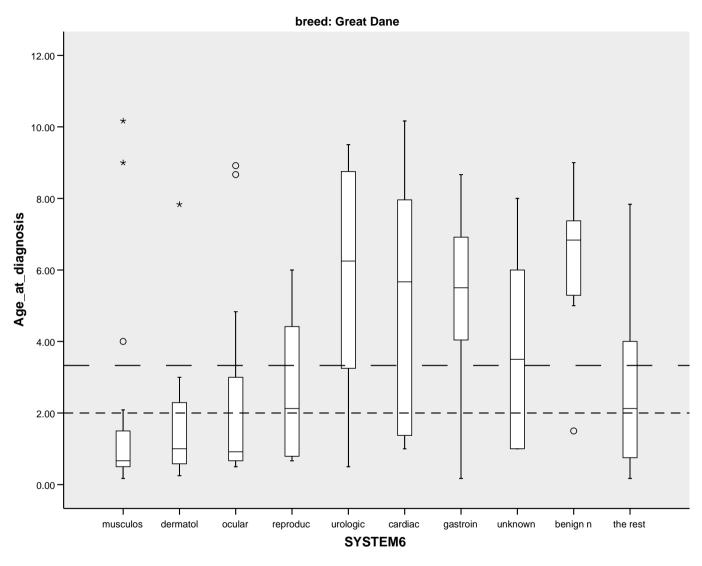


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Great Danes (N=74 dogs with 121 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (---) is the overall median age at diagnosis for Great Danes. 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 Great Danes.

		All con	ditions	
Disease condition		N	%	Most common specific conditions in descending order
1	Musculoskeletal	19	15.6	OCD (shoulder=unspecified>elbow; stifle); CHD; arthritis
2	Dermatologic	15	12.3	Dermatitis; mites (cheyletiella>demodex=sarcoptes); recurrent pyoderma
3	Ocular	14	11.5	Cherry eye; entropion; conjunctivitis
4	Reproductive	12	9.8	False pregnancy; pyometra; irregular heat cycles
5	Urologic	8	6.6	Cystitis; incontinence; haematuria
6	Benign neoplasia	7	5.7	Type unspecified; lipoma
7	Cardiac	7	5.7	Heart murmur; cardiomyopathy (unspecified); heart rhythm disorder
8	Gastrointestinal	7	5.7	Gastric dilatation/volvulus (GDV); campylobacter; colitis
9	Neurologic	7	5.7	Wobbler syndrome; deafness; degenerative myelopathy; hydrocephalus
10	Unknown	6	4.9	Undiagnosed illness
11	Respiratory	5	4.1	Kennel cough; noisy breathing
12	Immune mediated	4	3.3	Gluten-sensitive enteropathy; food hypersensitivity; allergy other (unspecified)
13	Cancer	3	2.5	Type unspecified; mast cell tumour (MCT)
14	Aural	2	1.6	Otitis externa
15	Endocrine	2	1.6	Diabetes mellitus; hypothyroidism
16	Dental	1	8.0	Retained puppy teeth
17	Hepatic	1	8.0	Hepatitis
18	Trauma	1	8.0	Forelimb
19	Other	1	0.8	Uncodeable
	Total	122	100.0	