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

Summary results of the Purebred Dog Health Survey for French Bulldogs

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%.

# French Bulldogs

A total of 334 forms were sent out and 72 were returned, representing 154 live dogs. This breed had a 21.6% response rate (72/334) and it represented 0.52% of all returns (72/13,741).

## **Mortality data**

A total of 71 deaths were reported and this represents 0.45% of all deaths reported in the survey (71/15,881). The median age at death for French Bulldogs was 9 years (min = 5 months, max = 14 years and 8 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 French Bulldogs. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for French Bulldogs.

Cause of death		N	%	Most common specific causes in descending order			
1	Cancer	27	38.0	Brain tumour; lymphoma; type unspecified (liver)			
2	Neurologic	12	16.9	Seizures; cauda equine syndrome			
3	Old age	6	8.5	Old age & age combinations			
4	Respiratory	5	7.0	Tracheal collapse; congenital tracheal hypoplasia			
5	Musculoskeletal	3	4.2	Arthritis			
6	Combinations	2	2.8				
7	Endocrine	2	2.8	Cushings or hyperadrenocorticism			
8	Gastrointestinal	2	2.8	Gastric dilatation/volvulus (GDV); colitis			
9	Unknown	2	2.8				
10	Behaviour	1	1.4	Unspecified			
11	Cardiac	1	1.4	Heart attack			
12	Cerebral vascular	1	1.4	Stroke or cerebral vascular accident			
13	Collapse	1	1.4				
14	Infection	1	1.4	Viral infection unspecified			
15	Other	1	1.4	Uncodeable			
16	Perioperative	1	1.4				
17	Pining	1	1.4				
18	Systemic	1	1.4	Allergy or insect bite or sting or snake bite			
19	Urologic	1	1.4	Chronic kidney failure			
	Total	71	100.0				



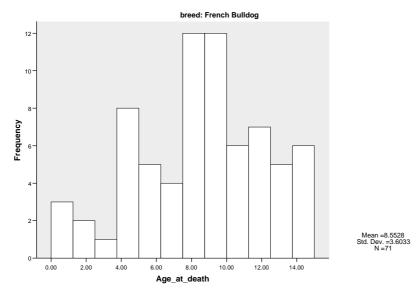


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 71 French Bulldog deaths with age at death reported.

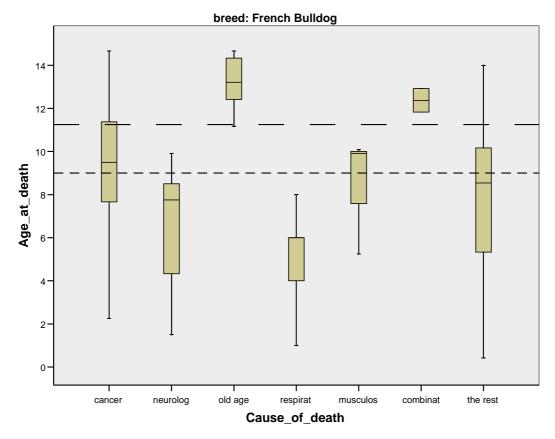


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in French Bulldogs (N=71). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for French Bulldogs. The solid line within each grey box represents the median age at death from the condition.

#### Morbidity data

The median current age of the 154 live dogs with a reported age was 4 years and 5 months (min=3 months, max=12 years and 8 months, Figure 3). Health information was reported for 154 live dogs of which 73 (47%) were healthy and 81 (53%) had at least one reported health condition, resulting in a total of 130 reported conditions with a median of 1 condition/dog (min=1, max=4).

The median current age of all healthy dogs with a reported age (N=73) was 3 years and 6 months (min=3 months, max=11 years and 10 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=81) was 5 years and 5 months (min=7 months, max=12 years and 8 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=127) was 3 years (min= 2 months, max= 12 years, Figure 4). Table 3 shows the disease conditions for French Bulldogs. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 153 French Bulldogs with reported gender and neuter status.

Neuter status								
Gender	Intact	Neutered	Totals					
Female	67	23	90 (59%)					
Male	42	21	63 (41%)					
Totals	109 (71%)	44 (29%)	153 (100%)					

There was no association between gender and neuter status (P=0.2955).

#### Histogram



Figure 3. Histogram showing frequency of current age in years for the 154 live French Bulldogs with age reported.

### Histogram

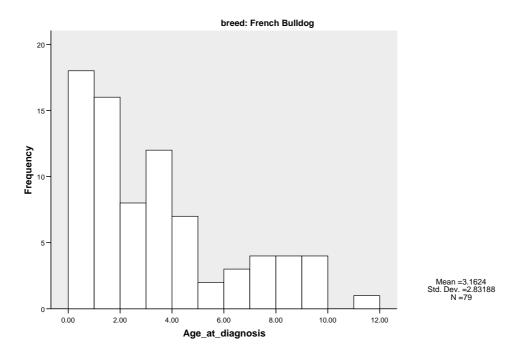


Figure 4. Histogram showing frequency of age at diagnosis for the 79 French Bulldogs with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

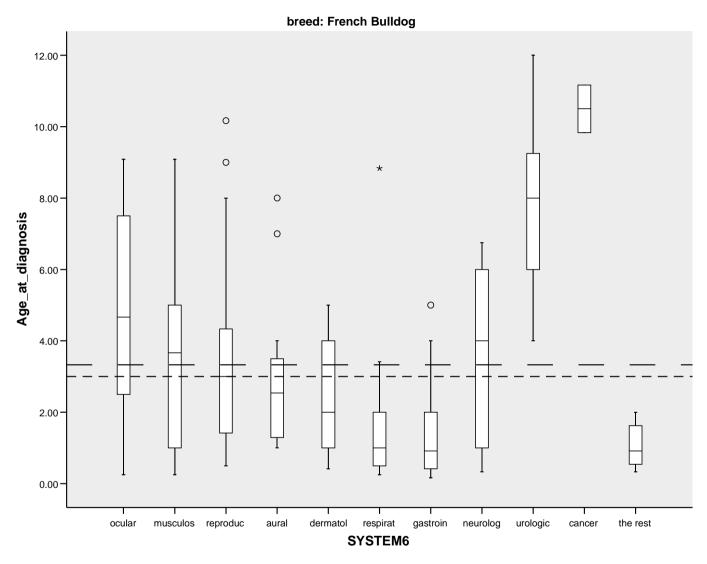


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for French Bulldogs (N=81 dogs with 127 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (---) is the overall median age at diagnosis for French Bulldogs. 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 French Bulldogs.

		All con	ditiona	
		All COI	ditions	
Disease condition		N	%	Most common specific conditions in descending order
1	Ocular	27	20.8	Corneal ulcer; KCS; cataracts; conjunctivitis; cherry eye; entropion; epiphora; PRA
2	Musculoskeletal	23	17.7	Patellar luxation; prognathism; hemivertebra; spondylitis
3	Reproductive	18	13.8	Dystochia (physical blockage>uterine inertia); pyometra; cryptorchid; irregular heat cycles
4	Aural	12	9.2	Otitis externa; aural haematoma
5	Dermatologic	10	7.7	Mites (demodex>cheyletiella=sarcoptes); dermatitis
6	Respiratory	10	7.7	BOAS; noisy breathing; kennel cough; long soft palate
7	Gastrointestinal	9	6.9	Colitis; regurgitation; IBD; pyloric stenosis; vomiting & diarrhoea
8	Neurologic	5	3.8	Seizures; IVDD (cervical, unspecified); cauda equine syndrome
9	Urologic	5	3.8	Incontinence; cystouroliths (struvite; unspecified); kidney failure
10	Immune mediated	3	2.3	Allergy (unspecified); dust mite allergy; flea allergy
11	Cancer	2	1.5	Carcinoma (small intestine); unspecified
12	Unknown	2	1.5	Undiagnosed illness
13	Anal gland	1	8.0	Anal sacculitis
14	Benign neoplasia	1	0.8	Lipoma
15	Cardiac	1	0.8	Heart murmur
16	Other	1	8.0	Uncodeable
	Total	130	100.0	

BOAS=brachycephalic obstructive airway syndrome