

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

Summary results of the
Purebred Dog Health Survey
for Border Terriers

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%.

Border Terriers

A total of 528 forms were sent out and 152 were returned, representing 504 live dogs. This breed had a 28.8 % response rate (152/528) and it represented 1.11% of all returns (152/13,741).

Mortality data

A total of 177 deaths were reported and this represents 1.11 % of all deaths reported in the survey (177/15,881). The median age at death for Border Terriers was 14 years (min = 2 months, max = 22 years and 1 month) and this was higher than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for Border Terriers. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Border Terriers.

Cause of death	No. of deaths	% of deaths	Most common specific causes in descending order
1 Old age	54	30.5	Old age & age combinations
2 Cancer	34	19.2	Type unspecified, lymphoma, carcinoma
3 Trauma	14	7.9	Road traffic accident, attacked by dog, unspecified
4 Urologic	12	6.8	Chronic kidney failure, unspecified
5 Combinations	10	5.6	Kidney and liver failure, seizures
6 Cerebrovascular	8	4.5	Stroke or cerebral vascular accident
7 Hepatic	6	3.4	Chronic liver failure
8 Behaviour	5	2.8	Aggression
9 Cardiac	5	2.8	Failure, murmur, attack
10 Gastrointestinal	5	2.8	IBD, colitis, foreign body, unspecified
11 Neurologic	5	2.8	Seizures, intervertebral disc disease
12 Endocrine	3	1.7	Diabetes mellitus, Cushings
13 Respiratory	3	1.7	Pneumonia, emphysema, unspecified
14 Musculoskeletal	2	1.1	Arthritis, muscle weakness
15 Other	2	1.1	Uncodeable
16 Perioperative	2	1.1	
17 Unknown	2	1.1	
18 Collapse	1	.6	
19 Immune mediated	1	.6	Immune disorder unspecified
20 Poisoning	1	.6	
21 Portosystemic shunt	1	.6	
22 Senility	1	.6	
Total	177	100.0	

Cancer: lymphosarcoma=lymphoma

Gastrointestinal: IBD=inflammatory bowel disease

Endocrine: Cushings disease=hyperadrenocorticism

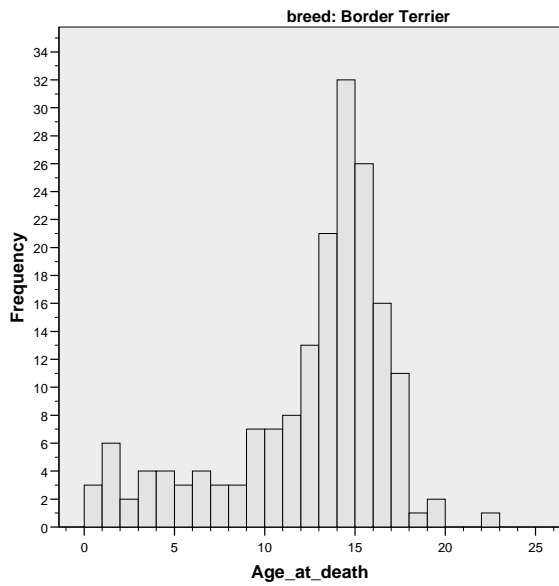


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 177 Border Terrier deaths with age at death reported.

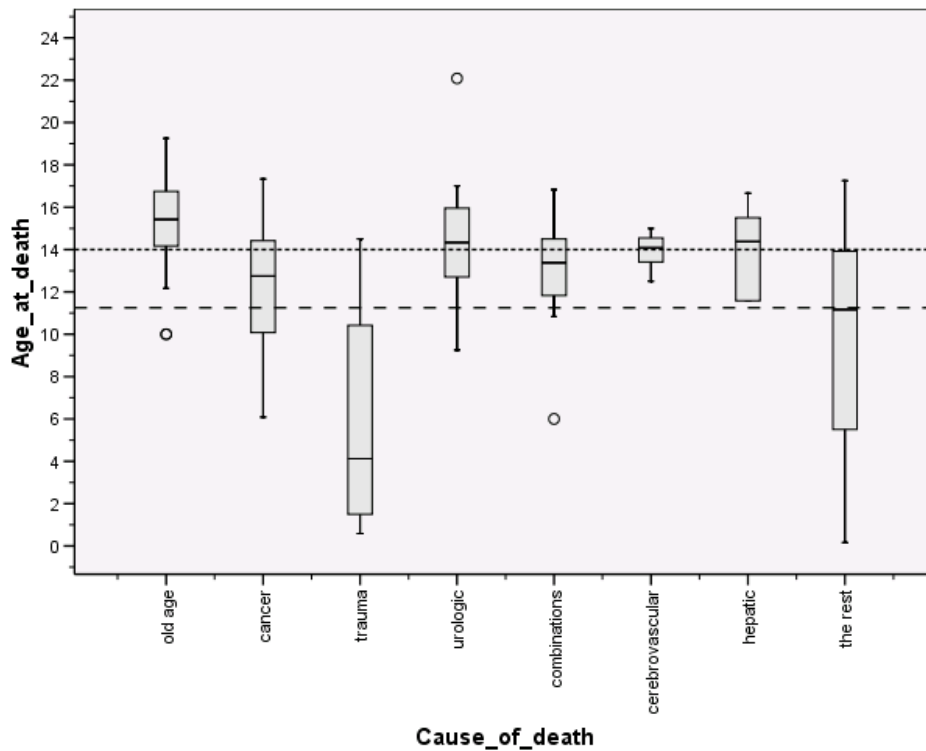


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Border Terriers (N=177). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Border Terriers. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 504 live dogs with a reported age was 4 years and 7 months (min=1 month, max=17 years and 3 months, Figure 3). Health information was reported for 504 live dogs of which 376 (75%) were healthy and 128 (25%) had at least one reported health condition, resulting in a total of 177 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=376) was 3 years and 9 months (min=1 month, max=15 years and 5 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=128) was 8 years (min=1 year and 2 months, max=17 years and 3 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=164) was 4 years and 1 month (min= 2 months, max= 14 years and 6 months, Figure 4). Table 3 shows the disease conditions for Border Terriers. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 499 Border Terriers with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	250	80	330 (66%)
Male	149	20	169 (34%)
Totals	399 (80%)	100 (20%)	499 (100%)

Significantly more females were neutered (P=0.0010).

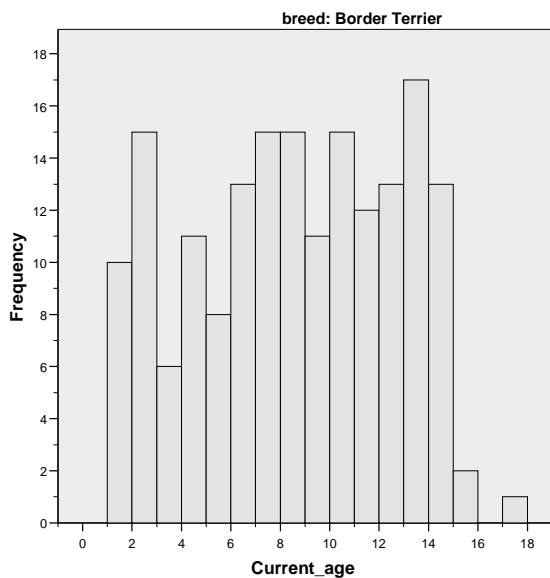


Figure 3. Histogram showing frequency of current age in years for the 504 live Border Terriers with age reported.

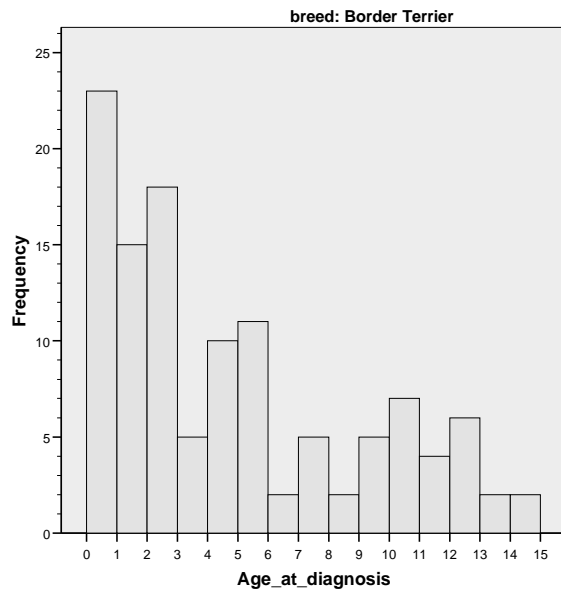


Figure 4. Histogram showing frequency of age at diagnosis for the 128 Border Terriers with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

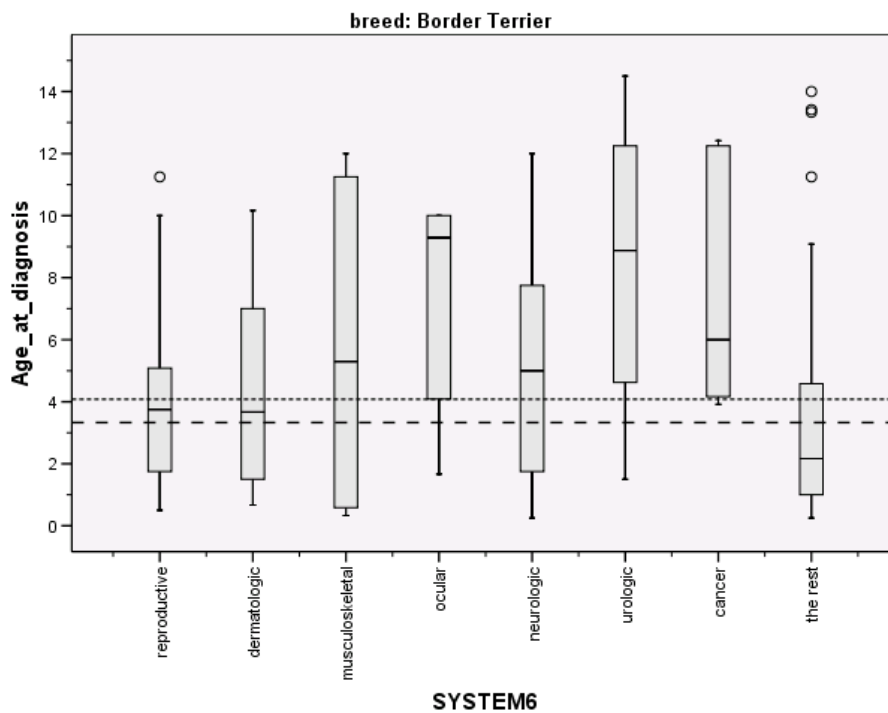


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Border Terriers (N=117 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Border Terriers. 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 Border Terriers.

Disease condition	All conditions		Prevalence	Most common specific conditions in descending order
	N	%	%	
1 Reproductive	36	20.3	7.14	Dystochia, pyometra, false pregnancy, infertility, irregular heats eclampsia, prostatic disease, cryptorchid
2 Dermatologic	23	13.0	4.56	Dermatitis, cheyletiella, demodex, fading nose pigment, pyoderma, ringworm, seborrhoea
3 Musculoskeletal	19	10.7	3.77	Arthritis, patellar luxation, prognathism, fracture, avascular necrosis FH, CHD, CLR, tendon injury, tail abnormality
4 Ocular	14	7.9	2.78	Cataracts, conjunctivitis, blindness, blepharitis, epiphora, infection
5 Neurologic	13	7.3	2.58	Seizures, granulomatous meningoencephalitis (GME), deafness
6 Cardiac	11	6.2	2.18	Murmur, arrhythmia, VSD, MVD, valve disease unspecified
7 Immune mediated	9	5.1	1.79	Atopy, food allergy, flea allergy
8 Respiratory	7	4.0	1.39	Kennel cough, bronchitis, noisy breathing
9 Urologic	7	4.0	1.39	Bladder infection, incontinence, blood in urine
10 Aural (ears)	6	3.4	1.19	Otitis externa
11 Gastrointestinal	6	3.4	1.19	Vomiting, pancreatitis, inappetance, intussusception, gastroenteritis unspecified, colitis
12 Cancer	5	2.8	0.99	Type unspecified – mammary, skin, unspecified, oral carcinoma, nasal adenocarcinoma
13 Dental	4	2.3	0.79	Dental disease, retained puppy teeth
14 Hepatic	3	1.7	0.60	Unspecified liver disease
15 Trauma	3	1.7	0.60	Hindlimb, forepaw
16 Anal gland	2	1.1	0.40	Anal sacculitis (anal gland impaction or infection or removal)
17 Behaviour	2	1.1	0.40	Aggression, unspecified
18 Benign neoplasia	2	1.1	0.40	Lipoma
19 Other	3	1.7	0.60	Uncodeable
20 Cerebrovascular	1	.6	0.20	Stroke or cerebral vascular accident
21 Endocrine	1	.6	0.20	Diabetes mellitus
Total	177	100.0	35.12	

Reproductive: dystochia= uterine inertia (failure to push) slightly>physical blockage (stuck puppy)

Dermatologic: dermatitis=undiagnosed skin irritation or scratching or itchy skin or pruritis

Musculoskeletal: FH=femoral head, CHD=canine hip dysplasia, CLR=cruciate ligament ruptures

Cardiac: VSD=ventricular septal defect, MVD=mitral valve disease

Gastrointestinal: inappetance=loss of appetite or anorexia