# **Boxer Health Survey 2020**

After removing all unusable responses (for example, respondents did not consent to Boxer Breed Clubs and the Kennel Club using the data for research purposes) a total of 2,865 individual responses remained, representing 3,969 dogs.

When asked how many Boxers do you own, out of 2,865 responses, 2,219 (77.5%) answered '1', 420 (14.7%) answered '2', 107 (3.7%) answered '3', 51 (1.8%) answered '4', 23 (0.8%) answered '5', and 45 (1.6%) answered '6 or more'.

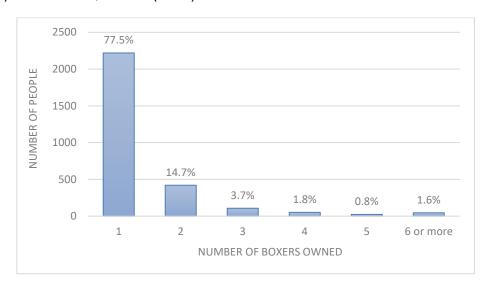


Figure 1: Number of Boxers owned per person completing the survey

When asked the sex of the dog(s), out of 3,284 dogs, 48.6% were male and 51.4% were female. When asked the neutered status of the dog(s), out of 3,283 dogs, 47.1% were entire and 52.9% were neutered. Results are shown in Table 1.

Sex	Neutered Status			
	Entire	Neutered	Unanswered	
Female	737 (22.4%)	952 (29.0%)	0	1,689
Male	809 (24.6%)	785 (23.9%)	1	1,595
Total	1,546	1,737	1	3,284

Table 1: Sex and neutered status of Boxers included in the survey

The median weight of the Boxers included in the survey was 30kg. Table 2 shows how active the Boxers included in this survey were considered to be, with the majority considered to be moderately active (44.1%, 1,364 of 3,093).

Activity	Number of dogs	Percentage
Highly active	1,355	43.8%
Mildly active	336	10.9%
Moderately active	1,364	44.1%
Not at all	38	1.2%
Total	3,093	

**Table 2:** Activity levels of Boxers included in the survey, as perceived by their owners

### Health

The survey investigated the number of dogs affected by specific conditions within different categories: 'Breathing', 'Cancer', 'Eye', 'Gastrointestinal', 'Heart', 'Hormonal', 'Kidney and/or Bladder', 'Muscle, Bone or Joint', 'Neurological', 'Reproductive', and 'Skin and/or Coat'. Within each of these categories, the respondents were given a choice of specific conditions, the choices of "not known" and "other" were also given.

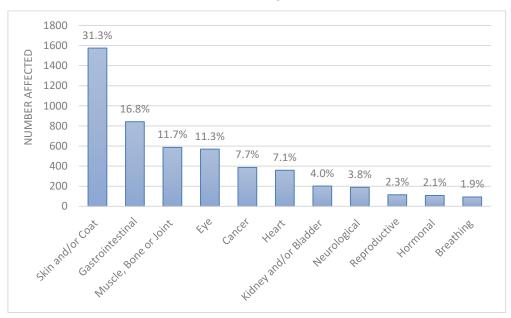


Figure 2: Overall summary of Boxer conditions reported in the survey

The data collected from this survey represents the total number of conditions selected by respondents about their dog(s). One dog might be affected by more than one condition (e.g. one dog may be affected by both food and environmental allergies) therefore the data often shows more conditions reported per category than number of dogs in that category.

The total number of specific conditions reported in this survey was 5,025. Out of the 5,025 specific conditions reported 31.3% were for 'Skin and/or Coat', 16.8% were for 'Gastrointestinal', 11.7% were for 'Muscle, Bone or Joint', 11.3% were for 'Eye' and 7.7% were for 'Cancer'. The results for each category are given in Table 3.

Body system	Number affected	Percentage
Skin and/or Coat	1,575	31.3%
Gastrointestinal	842	16.8%
Muscle, Bone or Joint	586	11.7%
Eye	569	11.3%
Cancer	387	7.7%
Heart	359	7.1%
Kidney and/or Bladder	202	4.0%
Neurological	189	3.8%
Reproductive	115	2.3%
Hormonal	108	2.2%
Breathing	93	1.9%
TOTAL	5,025	

**Table 3:** Overall summary of Boxer conditions reported in the survey

*Please note:* the total number of dogs affected by a 'Dental', 'Haematological' or 'Hepatic' condition are not included in the summary above because prior to the survey, these were not considered to be a concern within the breed and therefore the total number of dogs affected by specific conditions within each category was not collected.

Nevertheless, 259 owners reported that their dog(s) had been affected by a dental condition, 12 owners reported that their dog(s) had been affected by a haematological condition and 8 owners reported that their dog(s) had been affected by a hepatic condition.

# **Breathing Conditions**

When asked if any of their dogs have suffered from a breathing condition(s), out of the 2,160 responses, 82 (3.8%) answered "Yes" and 2,078 (96.2%) answered "No".

The total number of individual breathing conditions reported was 93. Of these, the most commonly reported condition was kennel cough, which affected 11.8% of the study sample (11 of 93). This was followed by upper respiratory tract problems (10.8%), brachycephalic obstructive airway syndrome (BOAS) (8.6%), and elongated soft palate (7.5%). Table 4 shows the total number and percentage of dogs affected by each reported breathing condition in descending order.

Specific condition	Number affected	Percentage
Kennel cough	11	11.8%
Upper respiratory tract problems	10	10.8%
BOAS	8	8.6%
Elongated soft palate	7	7.5%
Chronic cough	4	4.3%
Stenotic nares	4	4.3%
Chronic rhinitis	3	3.2%
Tonsil problems	3	3.2%
Lung lobe torsion	1	1.1%
Not known	12	12.9%
Other	30	32.3%
Total	93	

**Table 4**: Number and percentage of Boxers affected by each specific breathing condition, as reported in the survey

The most common answers to "other" for breathing conditions not already listed in the survey were: panting during hot weather or exercise (n=7), lung tumour (n=3), pyothorax (n=2), pneumonia (n=2), shortness of breath (n=2) and cardiac issues causing breathing difficulties (n=2).

#### Cancer

When asked if any of their dogs have suffered from cancer, out of the 2,134 responses, 324 (15.2%) answered "Yes" and 1,810 (84.8%) answered "No".

The total number of individual cancers reported was 387. Of these, the most commonly reported type of cancer was mast cell tumour, which affected 49.6% of the study sample (192 of 387). This was followed by melanoma (6.2%), lymphoma (5.9%), brain tumour (5.7%), and histiocytoma (5.4%). Table 5 shows the total number and percentage of dogs affected by each cancerous condition in descending order.

Specific condition	Number affected	Percentage
Mast cell tumour	192	49.6%
Melanoma	24	6.2%
Lymphoma	23	5.9%
Brain tumour	22	5.7%
Histiocytoma	21	5.4%
Mammary tumour	21	5.4%
Anal sac tumour	9	2.3%
Osteosarcoma	9	2.3%
Thyroid tumour	4	1.0%
Testicular tumour	3	0.8%
Vascular/ blood tumour	1	0.3%
Not known	17	4.4%
Other	40	10.3%
Total	387	

**Table 5:** Number and percentage of Boxers affected by each specific cancerous condition, as reported in the survey

The most common answers to "other" for cancerous conditions not already listed in the survey were: were sarcoma (n=5), pancreatic cancer (n=5), and lung cancer (n=3).

The median age that affected dogs were diagnosed with cancer was 6 years. Figure 3 shows the total number of dogs affected by cancer per year of age.

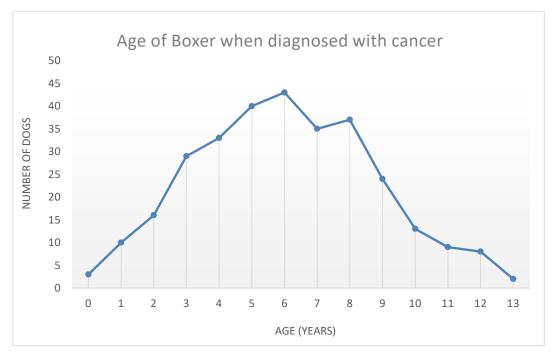


Figure 3: The age of Boxers when diagnosed with cancer, as reported in the survey

### **Eye Conditions**

When asked if any of their dogs have suffered from an eye condition(s), out of the 2,100 responses, 462 (22.0%) answered "Yes" and 1,638 (78.0%) answered "No".

The total number of individual eye conditions reported was 569. Of these, the most commonly reported condition was corneal ulceration, which affected 62.4% of the study sample (355 of 569). This was followed by distichiasis (5.3%), entropion (3.7%), chronic discharge (3.2%), and cataract (not-inherited) (2.8%). Table 6 shows the total number and percentage of dogs affected by each reported eye condition in descending order.

Specific condition	Number affected	Percentage
Corneal ulcer	355	62.4%
Distichiasis	30	5.3%
Entropion	21	3.7%
Chronic discharge	18	3.2%
Cataract (non-inherited)	16	2.8%
Corneal lipid deposition	15	2.6%
Ectropion	11	1.9%
Glaucoma	6	1.1%
Prolapsed gland	6	1.1%
Keratoconjunctivitis sicca	5	0.9%
Uveal cysts	4	0.7%
Pigmentary keratitis	3	0.5%
Persistent pupillary membrane (PPM)	2	0.4%
Hereditary cataract	1	0.2%
Not known	23	4.0%
Other	53	9.3%
Total	569	

**Table 6**: Number and percentage of Boxers affected by each specific eye condition, as reported in the survey

The most common answers to "other" for eye conditions not already listed in the survey were: conjunctivitis (n=11), ulcers (n=7), trauma (n=6), infection (n=5), and allergies (n=3).

#### **Gastrointestinal Conditions**

When asked if any of their dogs have suffered from a gastrointestinal condition(s), out of the 2,077 responses, 579 (27.9%) answered "Yes" and 1,498 (72.1%) answered "No".

The total number of individual gastrointestinal conditions was 842. Of these, the most commonly reported condition was food allergies/intolerance, which affected 21.4% of the study sample (180 of 842). This was followed by colitis (15.2%), chronic diarrhoea (12.6%), pancreatitis (11.5%), and gastroenteritis (9.0%). Table 7 shows the total number and percentage of dogs affected by each reported gastrointestinal condition in descending order.

Specific condition	Number affected	Percentage
Food allergies/intolerance	180	21.4%
Colitis	128	15.2%
Chronic diarrhoea	106	12.6%
Pancreatitis	97	11.5%
Gastroenteritis	76	9.0%
Flatulence	66	7.8%
Inflammatory bowel disease (IBD)	35	4.2%
Chronic vomiting	31	3.7%
Regurgitation	28	3.3%
Impacted anal glands	17	2.0%
Constipation	5	0.6%
GDV/bloat	5	0.6%
Histiocytic ulcerative colitis	5	0.6%
Megaoesophagus	4	0.5%
Cleft palate	1	0.1%
Inguinal hernia	1	0.1%
Not known	19	2.3%
Other	38	4.5%
Total	842	

**Table 7**: Number and percentage of Boxers affected by each specific gastrointestinal condition, as reported in the survey

The most common answers to "other" for gastrointestinal conditions not already listed in the survey were: diarrhoea (n=8), giardia (n=8), sensitive stomach (n=7), vomiting (n=4), and obstruction (n=3).

### **Heart Conditions**

When asked if any of their dogs have suffered from a heart condition(s), out of the 2,053 responses, 305 (14.9%) answered "Yes" and 1,748 (85.1%) answered "No".

The total number of individual heart conditions reported was 359. Of these, the most commonly reported condition was heart murmur, which affected 61.8% of the study sample (222 of 359). This was followed by aortic stenosis/subaortic stenosis (13.9%), dilated cardiomyopathy (DCM) (6.4%), irregular heart rate and/or rhythm (6.1%), and heart attack (2.8%). Table 8 shows the total number and percentage of dogs affected by each reported heart condition in descending order.

Specific condition	Number affected	Percentage
Heart murmur	222	61.8%
Aortic stenosis/subaortic stenosis	50	13.9%
Dilated cardiomyopathy (DCM)	23	6.4%
Irregular heart rate and/or rhythm	22	6.1%
Heart attack	10	2.8%
Arrhythmogenic right ventricular cardiomyopathy (ARVC)	6	1.7%
Myocarditis/ Endocarditis	2	0.6%
Mitral valve dysplasia (MVD)	1	0.3%
Not known	7	2.0%
Other	16	4.5%
Total	359	

**Table 8:** Number and percentage of Boxers affected by each specific heart condition, as reported in the survey

The most common answers to "other" for heart conditions not already listed in the survey were: leaking valves (n=5), collapse (n=2), tricuspid valve dysplasia (n=2), and abnormal heart beat (n=2).

The median age that affected dogs were diagnosed with a heart condition was 1 year and 8 months. Figure 4 shows the total number of dogs affected by a heart condition per year of age.

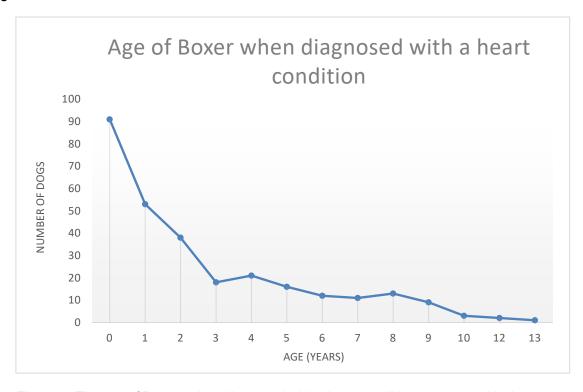


Figure 4: The age of Boxers when diagnosed with a heart condition, as reported in the survey

#### **Hormonal Conditions**

When asked if any of their dogs have suffered from a hormonal condition(s), out of 2,040 responses, 107 (5.3%) answered "Yes" and 1,933 (94.8%) answered "No".

The total number of individual hormonal conditions reported was 108. Of these, the most commonly reported condition was hypothyroidism, which affected 27.8% of the study sample (30 of 108). This was followed by hyperadrenocorticism (Cushing's disease) (6.5%), diabetes (0.9%), and hypoadrenocorticism (Addison's disease) (0.9%). Table 9 shows the total number and percentage of dogs affected by each reported hormonal condition in descending order.

Specific condition	Number affected	Percentage
Hypothyroidism	30	27.8%
Hyperadrenocorticism (Cushing's disease)	7	6.5%
Diabetes	1	0.9%
Hypoadrenocorticism (Addison's disease)	1	0.9%
Not known	18	16.7%
Other	51	47.2%
Total	108	

**Table 9:** Number and percentage of Boxers affected by each specific hormonal condition, as reported in the survey

The most common answers to "other" for hormonal conditions not already listed in the survey were: phantom pregnancy (n=21), and hair loss/alopecia (n=6).

#### Kidney and/or Bladder Conditions

When asked if any of their dogs have suffered from a kidney and/or bladder condition(s), out of the 2,027 responses, 169 (8.3%) answered "Yes" and 1,858 (91.7%) answered "No".

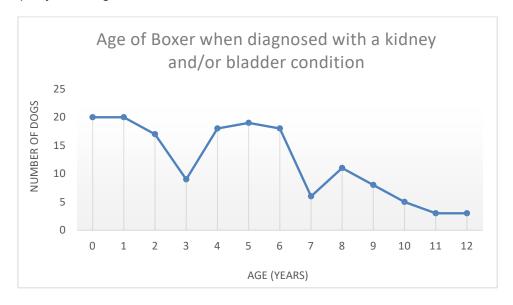
The total number of individual kidney and/or bladder conditions reported was 202. Of these, the most commonly reported condition was urinary tract infection (UTI), which affected 36.1% of the study sample (73 of 202). This was followed by urinary incontinence (29.7%), juvenile kidney disease (6.9%), acute kidney failure (5.5%), and urolithiasis (4.5%). Table 10 shows the total number and percentage of dogs affected by each reported kidney and/or bladder condition in descending order.

Specific condition	Number affected	Percentage
Urinary tract infection (UTI)	73	36.1%
Urinary incontinence	60	29.7%
Juvenile kidney disease (JKD)	14	6.9%
Acute kidney failure	11	5.5%
Urolithiasis	9	4.5%
Cystinuria	1	0.5%
Not known	6	3.0%
Other	28	13.9%
Total	202	

**Table 10:** Number and percentage of Boxers affected by each specific kidney and/or bladder condition, as reported in the survey

The most common answers to "other" for kidney and/or bladder conditions not already listed in the survey were: chronic kidney disease (n=3).

The median age that affected dogs were diagnosed with a kidney and/or bladder condition was 4 years. Figure 5 shows the total number of dogs affected by a kidney and/or bladder condition per year of age.



**Figure 5:** The age of Boxers when diagnosed with a kidney and/or bladder condition, as reported in the survey

# Muscle, Bone or Joint Conditions

When asked if any of their dogs have suffered from a muscle, bone or joint condition(s), out of the 2,024 responses, 466 (23.0%) answered "Yes" and 1,558 (77.0%) answered "No".

The total number of individual muscle, bone or joint conditions reported was 586. Of these, the most commonly reported condition was cranial cruciate ligament rupture, which affected 31.1% of the study sample (182 of 586). This was followed by osteoarthritis (18.3%), hip dysplasia (8.2%), chronic lameness (4.4%), and elbow dysplasia (2.7%). Table 11 shows the total number and percentage of dogs affected by each reported muscle, bone or joint condition in descending order.

Specific condition	Number affected	Percentage
Cranial cruciate ligament rupture (CCLR)	182	31.1%
Osteoarthritis (OA)	107	18.3%
Hip dysplasia	48	8.2%
Chronic lameness	26	4.4%
Elbow dysplasia	16	2.7%
Osteochondritis dissecans of the shoulder	10	1.7%
Carpal laxity syndrome	8	1.4%
Patellar luxation	8	1.4%
Osteochondritis dissecans (OCD) of the elbow	5	0.9%
Osteochondritis dissecans (OCD) of the hock	5	0.9%
Panosteitis (growing pains)	4	0.7%
Diffuse idiopathic skeletal hyperostosis (DISH)	3	0.5%
Osteochondritis dissecans (OCD) - unknown	2	0.3%
Not known	38	6.5%
Other	124	21.2%
Total	586	

**Table 11:** Number and percentage of Boxers affected by each specific muscle, bone or joint condition, as reported in the survey

The most common answers to "other" for muscle, bone or joint conditions not already listed in the survey were: spondylosis (n=21), spondylitis (n=11), stiffness (n=9), lameness (n=5), and trauma/injury (n=4).

# **Neurological Conditions**

When asked if any of their dogs have suffered from a neurological condition(s), out of the 2,008 responses, 155 (7.7%) answered "Yes" and 1,853 (92.3%) answered "No".

The total number of individual neurological conditions reported was 189. Of these, the most commonly reported condition was spondylosis deformans, which affected 30.7% of the study sample (58 of 189). This was followed by seizures (13.8%), idiopathic head tremor (8.5%), epilepsy - idiopathic (6.4%), and vestibular disease (5.3%). Table 12 shows the total number and percentage of dogs affected by each reported neurological condition in descending order.

Specific condition	Number affected	Percentage
Spondylosis deformans	58	30.7%
Seizures	26	13.8%
Idiopathic head tremor	16	8.5%
Epilepsy (idiopathic)	12	6.4%
Vestibular disease	10	5.3%
Steroid-responsive meningitis-arteritis (SRMA)	8	4.2%
Degenerative myelopathy (DM)	7	3.7%
Congenital deafness	3	1.6%
Epilepsy (cause known)	3	1.6%
Sensory neuropathy	1	0.5%
Not known	5	2.7%
Other	40	21.2%
Total	189	

**Table 12:** Number and percentage of Boxers affected by each specific neurological condition, as reported in the survey

The most common answers to "other" for neurological conditions not already listed in the survey were: stroke (n=4), tumour/cancer (n=4), and fused spine (n=4).

### **Reproductive Conditions**

When asked if any of their dogs have suffered from a reproductive condition(s), out of the 2,001 responses, 107 (5.4%) answered "Yes" and 1,894 (94.7%) answered "No".

The total number of individual reproductive conditions reported was 116. Of these, 43.1% were for male conditions (50 out of 116) and 56.0% were for female conditions (65 out of 116).

Overall the most commonly reported condition across sexes was cryptorchidism, which affected 34.5% of the study sample (40 of 116). This was followed by pseudopregnancy (24.1%), mastitis (10.3%), pyometra (9.5%) and follicular cysts (0.9%). Table 13 shows the total number and percentage of dogs affected by each reported reproductive condition.

	Specific condition	Number affected
Male conditions	Cryptorchidism	40 (80.0%)
	Other	10 (20.0%)
	Total	50
Female conditions	Pseudopregnancy	28 (43.1%)
	Mastitis	12 (18.5%)
	Pyometra	11 (16.9%)
	Follicular cysts	1 (1.5%)
	Other	13 (20.0%)
	Total	65
Not known		1
Total		116

**Table 13:** Number and percentage of Boxers affected by each specific reproductive condition, as reported in the survey

The most common answers to "other" for reproductive conditions not already listed in the survey were: infrequent seasons (n=3), and one testicle (n=2).

When asked if any of their dogs had ever been bred from, out of the 1,996 responses, 247 (12.4%) answered 'Yes' and 1,749 (87.6%) answered 'No'. When asked if any of these dogs have ever had a caesarean section, out of the 246 responses, 80 (32.5%) answered 'Yes' and 166 (67.5%) answered 'No'.

Table 14 shows whether the owner reported the caesarean section to be an elective or an emergency procedure. 16.1% (14 of 87) owners reported the caesarean section to be elective and 83.9% (73 of 87) owners reported the caesarean section to be an emergency.

	Number affected (C-section 1)	Number affected (C-section 2)	Total
Elective	13	1	14
Emergency	70	3	73
Total	83	4	87

**Table 14:** Shows whether the caesarean section was an elective or an emergency procedure (*C*-section 1/*C*-section 2 refers to the first and second caesarean section performed on the same bitch)

Out of 54 known reasons for caesarean section, uterine inertia was the most common (61.1%) following by dystocia (27.8%) then stillborn (11.1%), as shown in Table 15.

Reasons	Number affected (C-section 1)	Number affected (C-section 2)	Total
Dystocia	13	2	15
Stillborn	5	1	6
Uterine inertia	33	0	33
Not known	9	0	9
Other	26	3	29
Total	86	6	92

**Table 15:** Reasons for caesarean sections reported in the survey, and their numbers (*C-section 1/C-section 2 refers to the first and second caesarean section performed on the same bitch*)

The most common answers to "other" for reproductive conditions not already listed in the survey were: stuck puppy (n=5), exhaustion (n=2), twisted uterus (n=2), breeder decision (n=2), and large puppy (n=2).

### **Skin and/or Coat Conditions**

When asked if any of their dogs have suffered from a skin and/or coat condition(s), out of the 1,988 responses, 869 (43.7%) answered "Yes" and 1,119 (56.3%) answered "No".

The total number of individual skin and/or coat conditions reported was 1,575. Of these, the most commonly reported condition was allergies – dust, mites, pollen, which affected 16.5% of the study sample (260 of 1,575). This was followed by allergies – unknown (13.3%), excessive ear wax (11.3%), dermatitis (9.5%) and allergies – food (8.3%). Table 16 shows

the total number and percentage of dogs affected by each reported skin and/or coat condition in descending order.

Specific condition	Number affected	Percentage
Allergies (dust, mites, pollen)	260	16.5%
Allergies - unknown	210	13.3%
Excessive ear wax	178	11.3%
Dermatitis	150	9.5%
Allergies (food)	130	8.3%
Alopecia (hair loss)	129	8.2%
Skin cysts	95	6.0%
Lipoma	89	5.7%
Otitis externa	83	5.3%
Otitis media	75	4.8%
Pyoderma	22	1.4%
Pyotraumatic dermatitis	22	1.4%
Demodectic/sarcoptic mange	13	0.8%
Calcinosis circumscripta	3	0.2%
Not known	21	1.3%
Other	95	6.0%
Total	1575	

**Table 16:** Number and percentage of Boxers affected by each specific skin and/or coat condition, as reported in the survey

The most common answers to "other" for skin and/or coat conditions not already listed in the survey were: ear infection (n=13), yeast infection (n=7), histiocytoma (n=6), and acne (n=6).

#### **Dental Conditions**

When asked if any of their dogs have suffered from a dental condition, out of the 1,959 responses, 259 (13.2%) answered "Yes" and 1,700 (86.8%) answered "No".

When asked to specify the dental condition(s), the most common answers were: epulis (n=114), overgrown gums (n=29), lump/growth (n=20), tooth/teeth extraction (n=18), gums growing over teeth (n=15), broken tooth/teeth (n=9), gingival hyperplasia (n=8), bad breath (n=6), gingivitis (n=5), cyst (n=4), retained tooth/teeth (n=4), plaque (n=3), tumour/cancer (n=3), and grinding (n=3).

#### **Haematological Conditions**

When asked if any of their dogs have suffered from a haematological condition, out of the 1,959 responses, 12 (0.6%) answered "Yes" and 1,947 (99.4%) answered "No".

When asked to specify the haematological condition(s), the most common answers were: anaemia (n=3), cancer (n=2), hemangiosarcoma (n=1), mild azotaemia (n=1), and low platelet level (n=1).

### **Hepatic Conditions**

When asked if any of their dogs have suffered from a hepatic condition, out of the 1,959 responses, 8 (0.4%) answered "Yes" and 1,951 (99.6%) answered "No".

When asked to specify the hepatic condition(s), the most common answers were: liver disease (n=2), unable to diagnose (n=2), tumour (n=1), and inflammation (n=1).

# **Additional Conditions not listed in survey**

The respondents were provided with the opportunity to note any conditions not already covered by the previous questions. The conditions listed from the owners by category were:

### Cancer/tumour/lump

Thirteen reports of a benign lump/tumour

Three reports of oral growths

Two reports of mast cell tumour

One report of a brain tumour

One report of a melanoma

One report of lung cancer

One report of focal/fibro adnexal dysplasia

One report of a polyp

#### **Dental**

Two reports of overgrown gums

One report of epulis

#### **Dermatological**

Twelve reports of allergies

Nine reports of cysts

Six reports of histiocytoma

Two reports of skin tags

Two reports of skin problems

Two reports of acne

Two reports of hyperkeratosis

Two reports of an abscess

One report of a dry flaky nose

One report of demodex mange

One report of a broken nail

#### Ear

Three reports of deafness

Two reports of an ear infection

One report of a detached ear drum

One report of aural ablation

# Eye

One report of an eye ulcer

#### **Gastrointestinal**

Twelve reports of pancreatitis

Four reports of anal gland issues

Three reports of food intolerance

Two reports of vitamin B12 deficiency

Two reports of colitis

Two reports of intussusceptions

One report of anal gland abscess

One report of vomiting

One report of bloat

One report of faecal impaction

One report of gastric reflux

One report of giardia

One report of sensitive stomach

One report of enteropathy

#### Heart

Two reports of heart murmur

Two reports of cardiomyopathy

# Haematological

Two reports of spleen removal

One report of a ruptured spleen

One report of nodules on spleen

One report of pneumonia

One report of blood granules on leg

One report of angiomatosis

#### Hormonal

Six reports of thyroid issues

One report of an underactive thyroid

One report of Cushing's disease

# **Immunological**

One report of lupus

One report of sepsis

One report of rhinitis

One report of Canine Immune Mediated Haemolytic Anaemia (IMHA)

One report of Canine Immune Mediated Thrombocytopenia (IMTP)

One report of aspergillosis

One report of pseudomonas aeruginosa

# Muscle, bone or joint

Seven reports of arthritis

Six reports of a tail injury

Three reports of cruciate ligament rupture

One report of a radial wrist bone malformation

One report of a tail dislocation

One report of a fracture

# **Neurological**

Six report of meningitis

Five reports of undiagnosed fainting

Four reports of epilepsy

Two reports of seizures

One report of fitting

One report of a brain problem (unspecified)

One report of a drooping face

One report of dementia

One report an idiopathic head tremor

One report of head bobbing

One report of vestibular syndrome

One report of a spinal stroke

One report of brain lesions

One report of Horner Syndrome

One report of vasovagal

# Reproductive

Four reports of cryptorchidism

Three reports of an enlarged prostate

One report of a phantom pregnancy

One report of a 'mis-shaped' vagina

One report of a testicular problem (unspecified)

# Respiratory

One report of heavy breathing

One report of a narrow nostril

One report of a soft palate issue

#### **Urinary**

Five reports of urinary incontinence

Two reports of kidney disease

One report of a urinary tract infection

One report of a single kidney

# Other

One report of a grass seed infection

One report of hay fever

One report of a hypersensitivity disorder

One report of sleep apnea