

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

Summary results of the  
Purebred Dog Health Survey  
for the Shih Tzu 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 Shih Tzu breed

A total of 265 forms were sent out and 63 were returned, representing 254 live dogs. This breed had a 23.8% response rate (63/265) and it represented 0.46% of all returns (63/13,741).

### Mortality data

A total of 83 deaths were reported and this represents 0.52% of all deaths reported in the survey (83/15,881). The median age at death for the Shih Tzu breed was 13 years and 2 months (min = 1 year and 6 months, max = 19 years and 4 months) and this was higher than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for the Shih Tzu 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 Shih Tzu breed.

Cause of death	N	%	Most common specific causes in descending order
1 Old age	17	20.5	Old age & age combinations
2 Cardiac	15	18.1	Heart attack; heart failure; heart defect unspecified
3 Urologic	13	15.7	Kidney failure (chronic>acute)
4 Cancer	12	14.5	Type unspecified; brain tumour
5 Combinations	6	7.2	
6 Cerebral vascular	3	3.6	Stroke or cerebral vascular accident
7 Hepatic	3	3.6	Liver failure
8 Other	3	3.6	Uncodeable
9 Endocrine	2	2.4	Cushings disease
10 Trauma	2	2.4	Attacked by dog; spinal injury
11 Unknown	2	2.4	
12 Neurologic	1	1.2	Seizures
13 Ocular	1	1.2	Blindness
14 Pining	1	1.2	
15 Respiratory	1	1.2	Bronchitis
16 Sudden death	1	1.2	
Total	83	100.0	

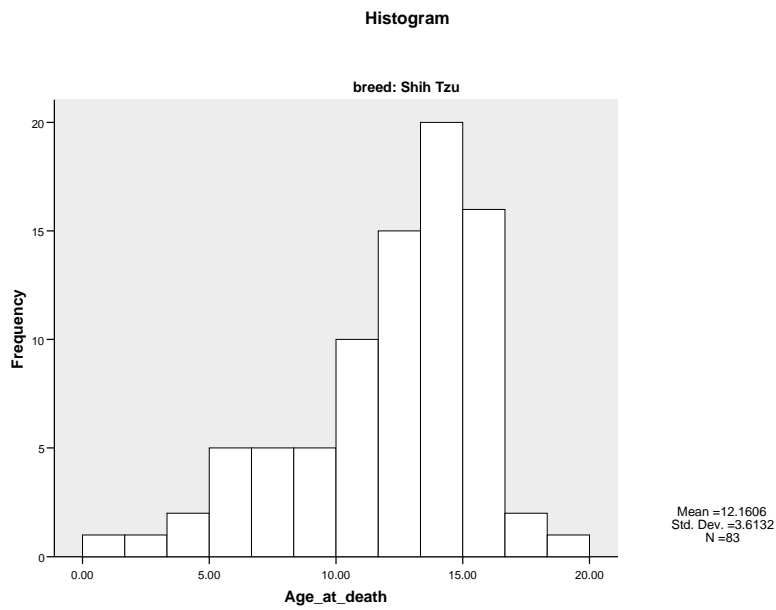


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 83 Shih Tzu deaths with age at death reported.

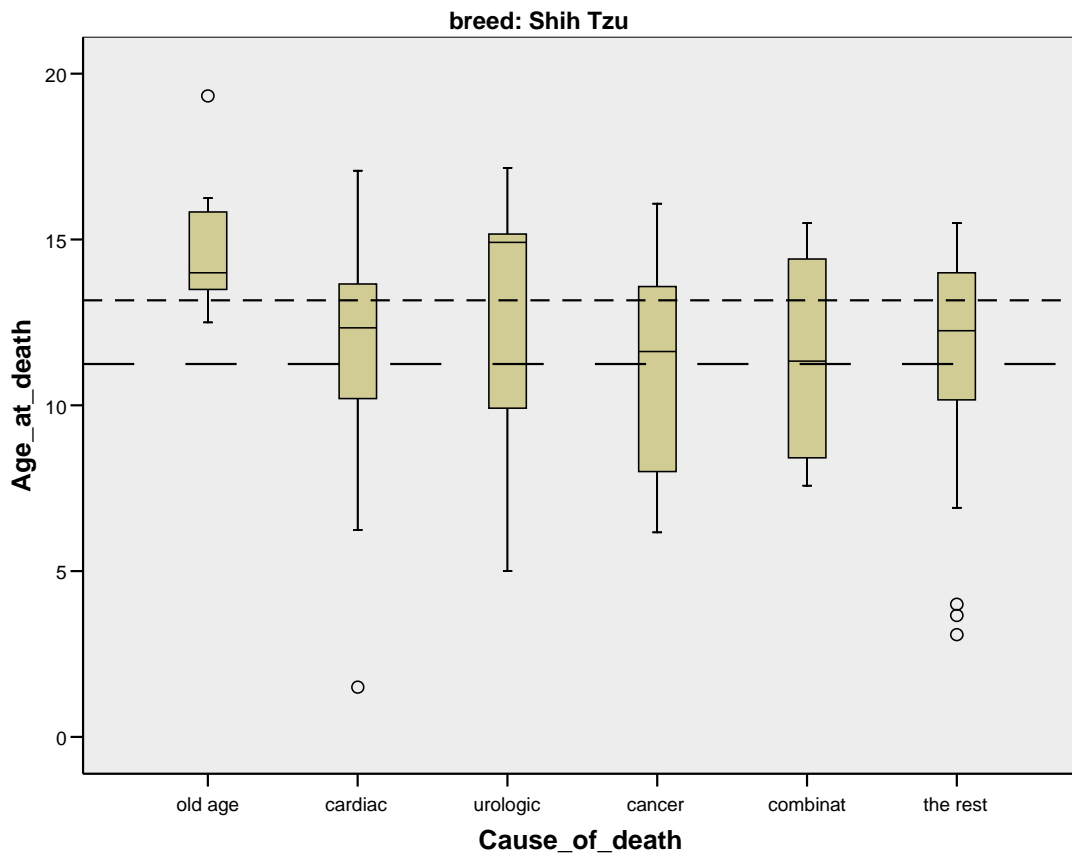


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in the Shih Tzu breed (N=83). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for the Shih Tzu breed. The solid line within each grey box represents the median age at death from the condition.

**Morbidity data**

The median current age of the 254 live dogs with a reported age was 4 years and 7 months (min=2 months, max=16 years and 7 months, Figure 3). Health information was reported for 254 live dogs of which 172 (68%) were healthy and 82 (32%) had at least one reported health condition, resulting in a total of 126 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=172) was 3 years and 7 months (min=2 months, max=16 years and 7 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=75) was 6 years and 10 months (min=4 months, max=16 years). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=118) was 4 years (min= 1 month, max= 15 years and 3 months, Figure 4). Table 3 shows the disease conditions for the Shih Tzu breed. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for the 250 Shih Tzu breed with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	115	56	171 (68%)
Male	61	18	79 (32%)
Totals	176 (70%)	74 (30%)	250 (100%)

There was no association between gender and neuter status (P=0.1086).

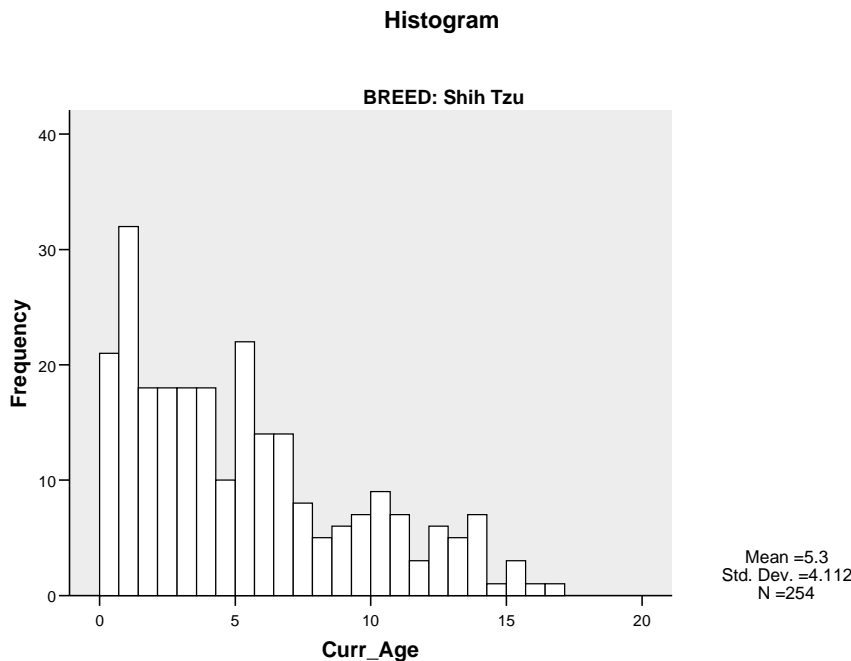


Figure 3. Histogram showing frequency of current age in years for the 254 live Shih Tzu breed with age reported.

### Histogram

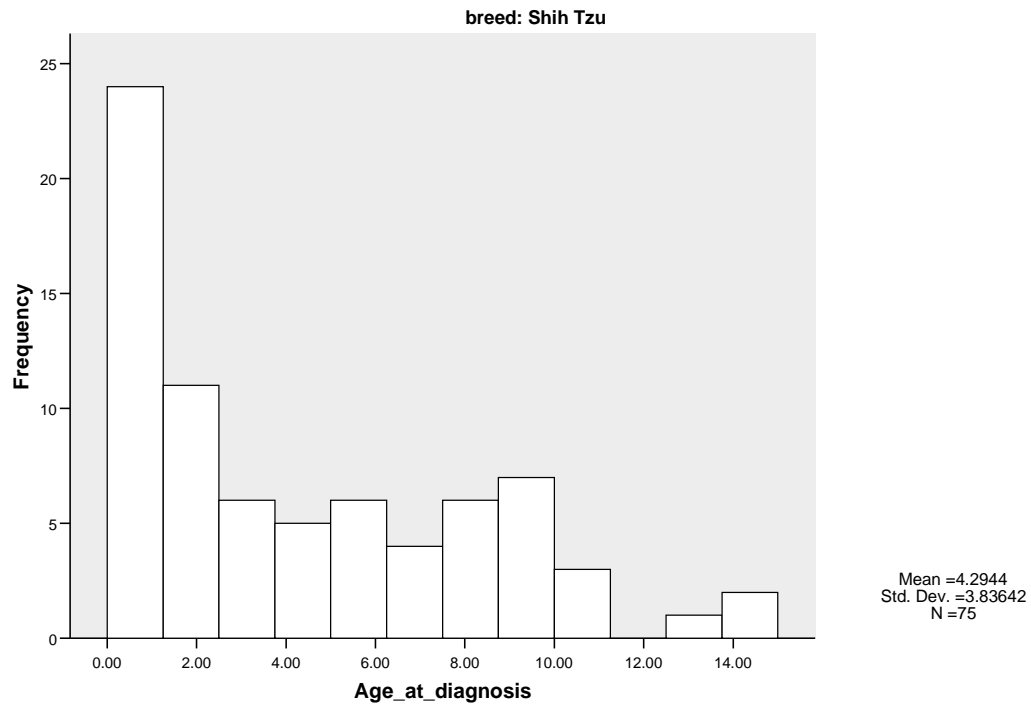


Figure 4. Histogram showing frequency of age at diagnosis for the 75 Shih Tzu breed with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

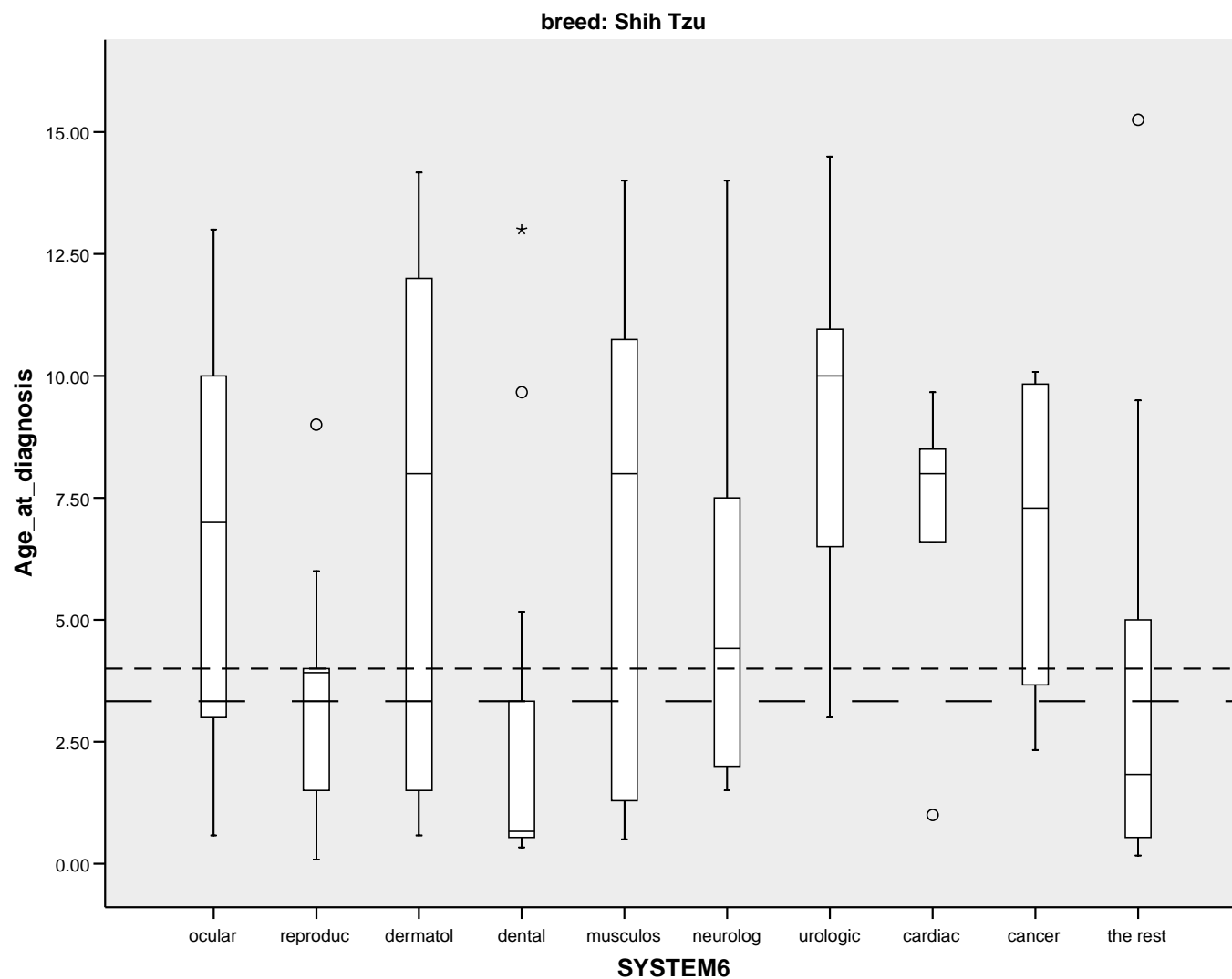


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for the Shih Tzu breed (N=75 dogs with 118 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for the Shih Tzu 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 Shih Tzu breed.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Ocular	18	14.3	Corneal ulcer; cataracts; KCS; glaucoma; epiphora
2 Reproductive	18	14.3	False pregnancy; dystochia (uterine inertia=physical blockage); irregular heat cycles
3 Dermatologic	13	10.3	Dermatitis; pyotraumatic dermatitis; fading nose pigment
4 Dental	11	8.7	Retained puppy teeth; dental disease; dental deformity
5 Musculoskeletal	11	8.7	Arthritis (unspecified>hips=hindlimbs); CHD; CLR; stiff joints; sprain or strain
6 Neurologic	8	6.3	IVDD; seizures; deafness
7 Respiratory	8	6.3	Snoring; kennel cough; constricted nostrils; long soft palate; noisy breathing; pyothorax
8 Urologic	7	5.6	Cystouroliths (unspec); kidney failure (chronic>acute); haematuria
9 Cardiac	6	4.8	Heart murmur (unspecified>with clinical signs); arrhythmia; heart valve condition
10 Cancer	4	3.2	Unspecified (skin=mammary); MCT (lip); melanoma (eyelid)
11 Gastrointestinal	4	3.2	Colitis; inappetance
12 Trauma	4	3.2	Eyeball; chest; other (unspecified)
13 Immune mediated	3	2.4	Atopy; flea allergy; food allergy
14 Unknown	3	2.4	Undiagnosed illness
15 Aural	2	1.6	Otitis externa; ear mites
16 Hepatic	2	1.6	Portosystemic shunt (PSS)
17 Cardiopulmonary	1	0.8	Pleural effusion
18 Cerebrovascular	1	0.8	Stroke or cerebral vascular accident
19 Endocrine	1	0.8	Cushings disease
20 Other	1	0.8	Uncodeable
Total	126	100.0	