

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

Summary results of the  
Purebred Dog Health Survey  
for Miniature Schnauzers

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%.

## Miniature Schnauzers

A total of 583 forms were sent out and 289 were returned, representing 586 live dogs. This breed had a 49.6% response rate (289/583) and it represented 2.10% of all returns (289/13,741).

### Mortality data

A total of 214 deaths were reported and this represents 1.35% of all deaths reported in the survey (214/15,881). The median age at death for Miniature Schnauzers was 12 years and 1 month (min = 7 months, max = 18 years and 2 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 Miniature Schnauzers. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for Miniature Schnauzers.

| Cause of death               | N   | %     | Most common specific causes in descending order         |
|------------------------------|-----|-------|---|
| 1 Cancer                     | 46  | 21.5  | Type unspecified (liver, stomach)                       |
| 2 Old age                    | 36  | 16.8  | Old age and age combinations                            |
| 3 Cardiac                    | 25  | 11.7  | Heart failure; heart attack; heart defect unspecified   |
| 4 Neurologic                 | 14  | 6.5   | Seizures; IVDD; spondylosis; unspecified                |
| 5 Combinations               | 13  | 6.1   |   |
| 6 Hepatic                    | 11  | 5.1   | Liver disease (unspecified); liver failure              |
| 7 Cerebral vascular          | 9   | 4.2   | Stroke or cerebral vascular accident                    |
| 8 Endocrine                  | 8   | 3.7   | Cushings disease; diabetes mellitus; diabetes insipidus |
| 9 Gastrointestinal           | 7   | 3.3   | Pancreatitis; haemorrhagic gastroenteritis (HGE)        |
| 10 Other                     | 7   | 3.3   | Uncodeable  |
| 11 Urologic                  | 7   | 3.3   | Chronic kidney failure                                  |
| 12 Perioperative             | 4   | 1.9   |   |
| 13 Respiratory               | 4   | 1.9   | Choked; tracheal collapse; unspecified                  |
| 14 Reproductive              | 3   | 1.4   | Pyometra  |
| 15 Unknown                   | 3   | 1.4   |   |
| 16 Ocular                    | 2   | 0.9   | Blindness   |
| 17 Senility                  | 2   | 0.9   |   |
| 18 Trauma                    | 2   | 0.9   | Attacked by dog; unspecified                            |
| 19 Portosystemic shunt (PSS) | 1   | 0.5   |   |
| 20 Behaviour                 | 1   | 0.5   | Unspecified behavioural problem                         |
| 21 Cardiovascular            | 1   | 0.5   | Unspecified   |
| 22 Hyperthermia              | 1   | 0.5   |   |
| 23 Immune mediated           | 1   | 0.5   | Haemolytic anaemia                                      |
| 24 Infection                 | 1   | 0.5   | Viral (unspecified)                                     |
| 25 Internal bleeding         | 1   | 0.5   |   |
| 26 Musculoskeletal           | 1   | 0.5   | Arthritis   |
| 27 Poisoning                 | 1   | 0.5   |   |
| 28 Septicaemia               | 1   | 0.5   |   |
| 29 Sudden death              | 1   | 0.5   |   |
| Total                        | 214 | 100.0 |   |

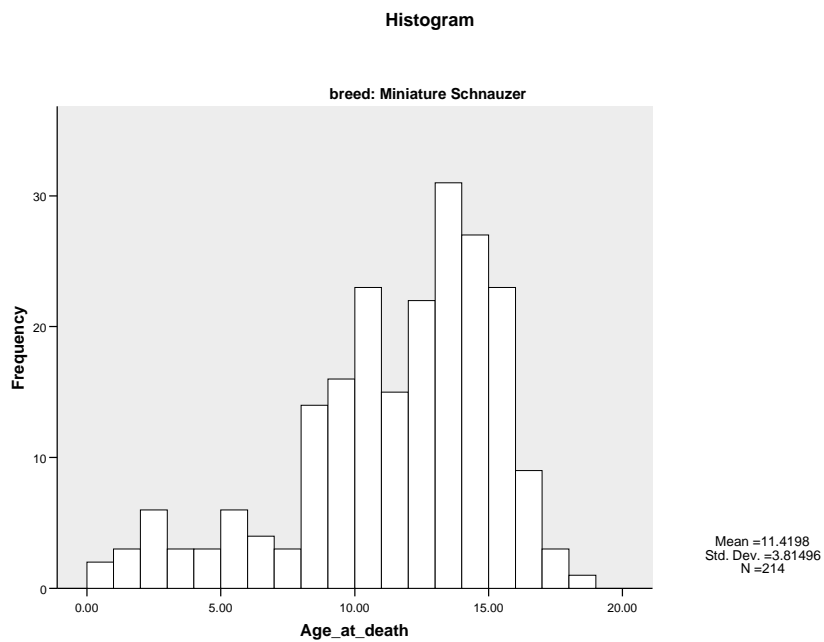


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 214 Miniature Schnauzer deaths with age at death reported.

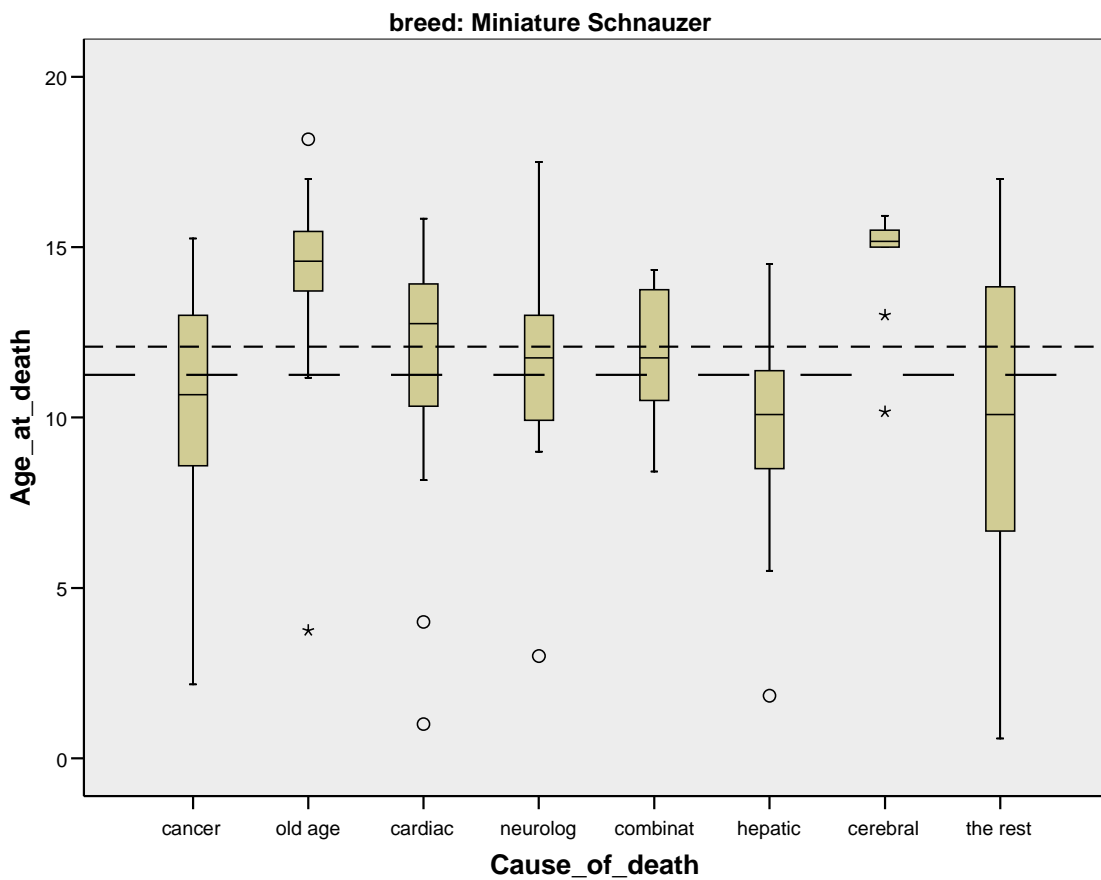


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in Miniature Schnauzers (N=214). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for Miniature Schnauzers. The solid line within each grey box represents the median age at death from the condition.

### Morbidity data

The median current age of the 584 live dogs with a reported age was 4 years and 7 months (min=2 months, max=16 years and 6 months, Figure 3). Health information was reported for 586 live dogs of which 393 (67%) were healthy and 193 (33%) had at least one reported health condition, resulting in a total of 388 reported conditions with a median of 1 condition/dog (min=1, max=9).

The median current age of all healthy dogs with a reported age (N=393) was 3 years and 4 months (min=2 months, max=15 years and 9 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=186) was 7 years and 9 months (min=8 months, max=16 years and 6 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=374) was 5 years (min= 2 months, max= 14 years and 3 months, Figure 4). Table 3 shows the disease conditions for Miniature Schnauzers. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 586 Miniature Schnauzers with reported gender and neuter status.

| Gender | Neuter status |           | Totals     |
|--------|---------------|-----------|------------|
|        | Intact        | Neutered  |            |
| Female | 185           | 187       | 372 (63%)  |
| Male   | 163           | 51        | 214 (37%)  |
| Totals | 348 (59%)     | 238 (41%) | 586 (100%) |

Significantly more females were neutered (P<0.0001).

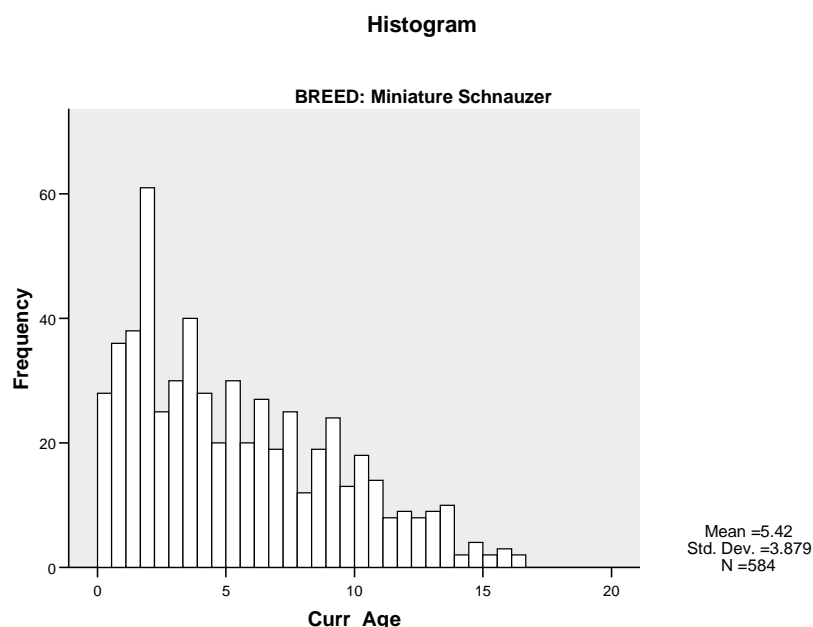


Figure 3. Histogram showing frequency of current age in years for the 584 live Miniature Schnauzers with age reported.

## Histogram

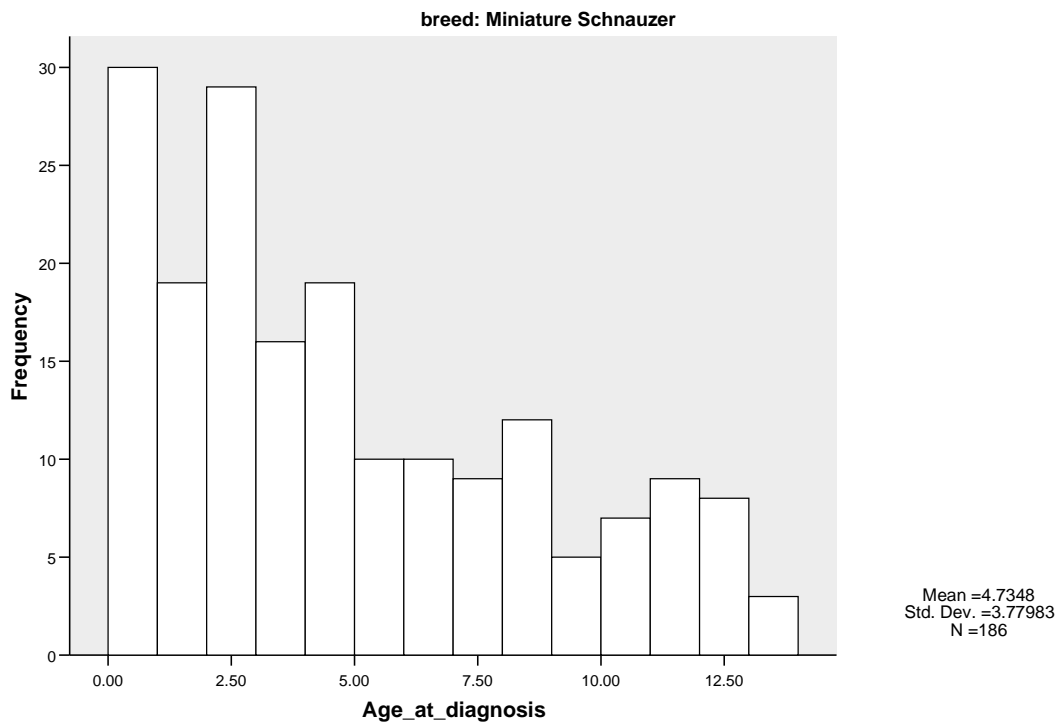


Figure 4. Histogram showing frequency of age at diagnosis for the 186 Miniature Schnauzers with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

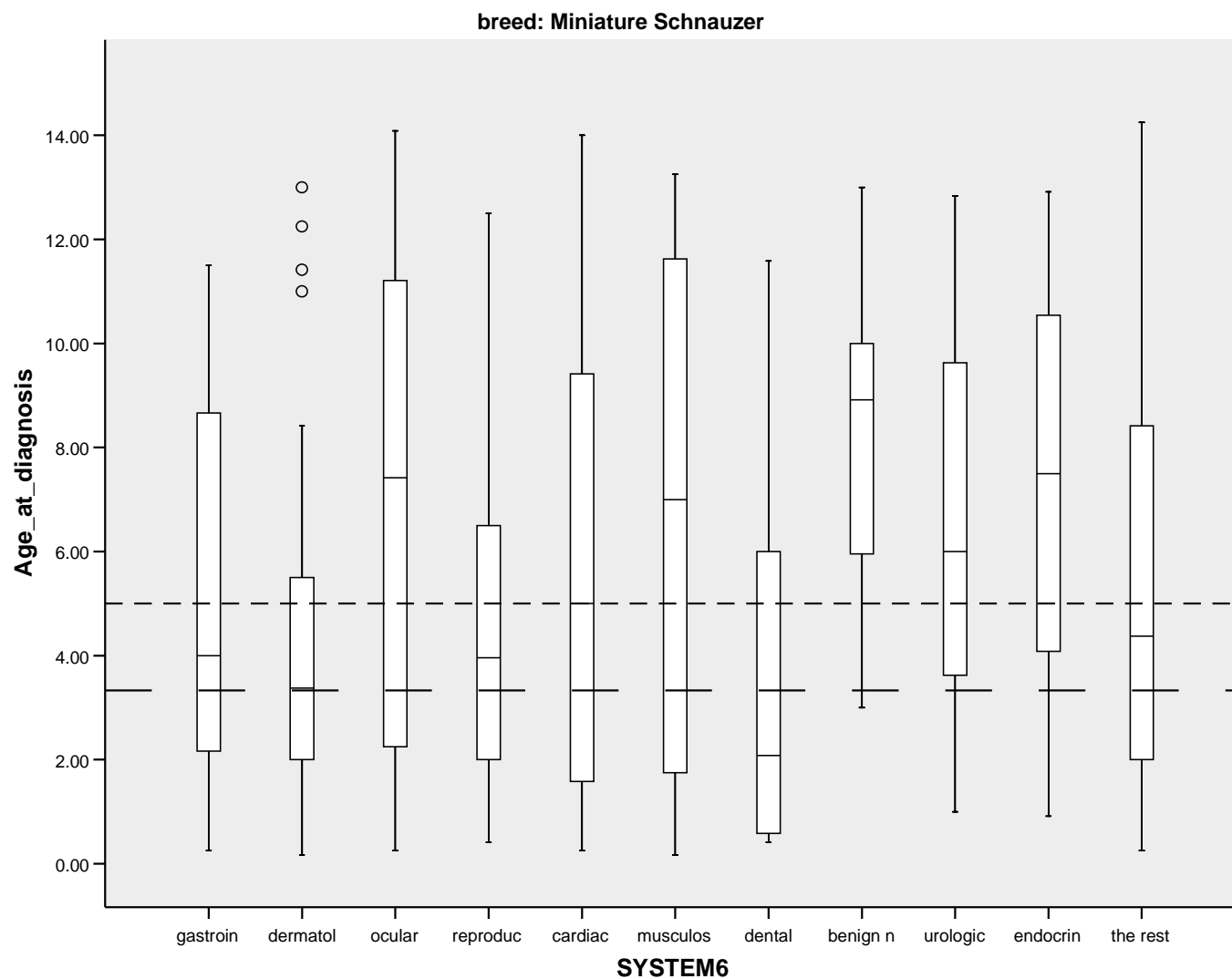


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for Miniature Schnauzers (N=186 dogs with 374 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for Miniature Schnauzers. 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 Miniature Schnauzers.

| Disease condition  | All conditions |       | Most common specific conditions in descending order                                       |
|--------------------|----------------|-------|---|
|                    | N              | %     |   |
| 1 Gastrointestinal | 46             | 11.9  | Pancreatitis; colitis; haemorrhagic gastroenteritis                                       |
| 2 Dermatologic     | 42             | 10.8  | Dermatitis; alopecia; recurrent pyoderma; pyotraumatic dermatitis; fungal skin infection  |
| 3 Ocular           | 39             | 10.1  | Cataracts; blocked tear ducts; KCS; epiphora; corneal ulcer; red eye                      |
| 4 Reproductive     | 37             | 9.5   | Pyometra; vaginitis; difficulty whelping (unspecified); false pregnancy; infertility      |
| 5 Cardiac          | 33             | 8.5   | Heart murmur (unspecified>without clinical signs>grade 2>rest); arrhythmia                |
| 6 Musculoskeletal  | 29             | 7.5   | Arthritis (hindlimb>unspecified>spine>rest); prognathism; CHD                             |
| 7 Dental           | 26             | 6.7   | Retained puppy teeth; dental disease; defect other than extra teeth                       |
| 8 Benign neoplasia | 24             | 6.2   | Lipoma; adenoma (anal); cysts (leg); unspecified (neck)                                   |
| 9 Urologic         | 19             | 4.9   | Cystouroliths (unspecified>struvite>calcium oxalate=cystine); cystitis; incontinence      |
| 10 Endocrine       | 16             | 4.1   | Hypothyroidism; Cushing's disease; diabetes mellitus; hyperthyroidism; pituitary dwarfism |
| 11 Immune mediated | 16             | 4.1   | Food allergy; flea allergy; atopy; other allergy (unspecified)                            |
| 12 Neurologic      | 14             | 3.6   | Seizures; IVDD (unspecified>lumbar); meningitis   |
| 13 Cancer          | 12             | 3.1   | Type unspecified (skin>rest); carcinoma (liver)   |
| 14 Respiratory     | 11             | 2.8   | Kennel cough; bronchitis; rhinitis; noisy breathing; respiratory infection                |
| 15 Aural           | 6              | 1.5   | Otitis externa; excessive ear wax; ear mites  |
| 16 Unknown         | 5              | 1.3   | Undiagnosed or unknown; undiagnosed liver disease   |
| 17 Behaviour       | 3              | 0.8   | Unspecified   |
| 18 Other           | 3              | 0.8   | Uncodeable  |
| 19 Anal gland      | 2              | 0.5   | Anal sacculitis   |
| 20 Cerebrovascular | 2              | 0.5   | Stroke or cerebral vascular accident  |
| 21 Haematopoietic  | 1              | 0.3   | Bleeding disorder unspecified   |
| 22 Hepatic         | 1              | 0.3   | Unspecified   |
| 23 Trauma          | 1              | 0.3   | Spine   |
| Total              | 388            | 100.0 |   |