



**THE KENNEL CLUB
DOG HEALTH**

Shetland Sheepdog

Pedigree Breed Health Survey

Forms were received representing 360 living dogs & 56 deceased dogs.

Mortality results

A total of 56 deaths were reported, representing 1.00% of all deaths reported in the Pedigree Breed Health survey. The median longevity for the Shetland Sheepdog was 11 years (Figure 1). Table 1 shows the causes of death for the breed. Age at death is presented for the most common causes in Figure 2.

Table 1 The twenty most common causes of death/reasons for euthanasia (N = 56 deceased dogs).

Cause of death	Number of cases	Proportion (%)
Cancer - unspecified	7	12.50
Cardiomyopathy	7	12.50
Old Age	7	12.50
Kidney Failure	6	10.71
Hepatopathy liver disorder	2	3.57
Liver Failure	2	3.57
Unknown	2	3.57
Adverse reaction to drugs	1	1.79
Allergies	1	1.79
Cardiac heart Failure	1	1.79
Cardiac Heart murmur	1	1.79
Cushing's Disease	1	1.79
Diarrhoea	1	1.79
Dysautonomia	1	1.79
Epilepsy	1	1.79
Gastroenteritis	1	1.79
Hepatocutaneous syndrome Skin disease	1	1.79
Intestinal tumour	1	1.79
Kidney disease	1	1.79
Mammary tumour	1	1.79

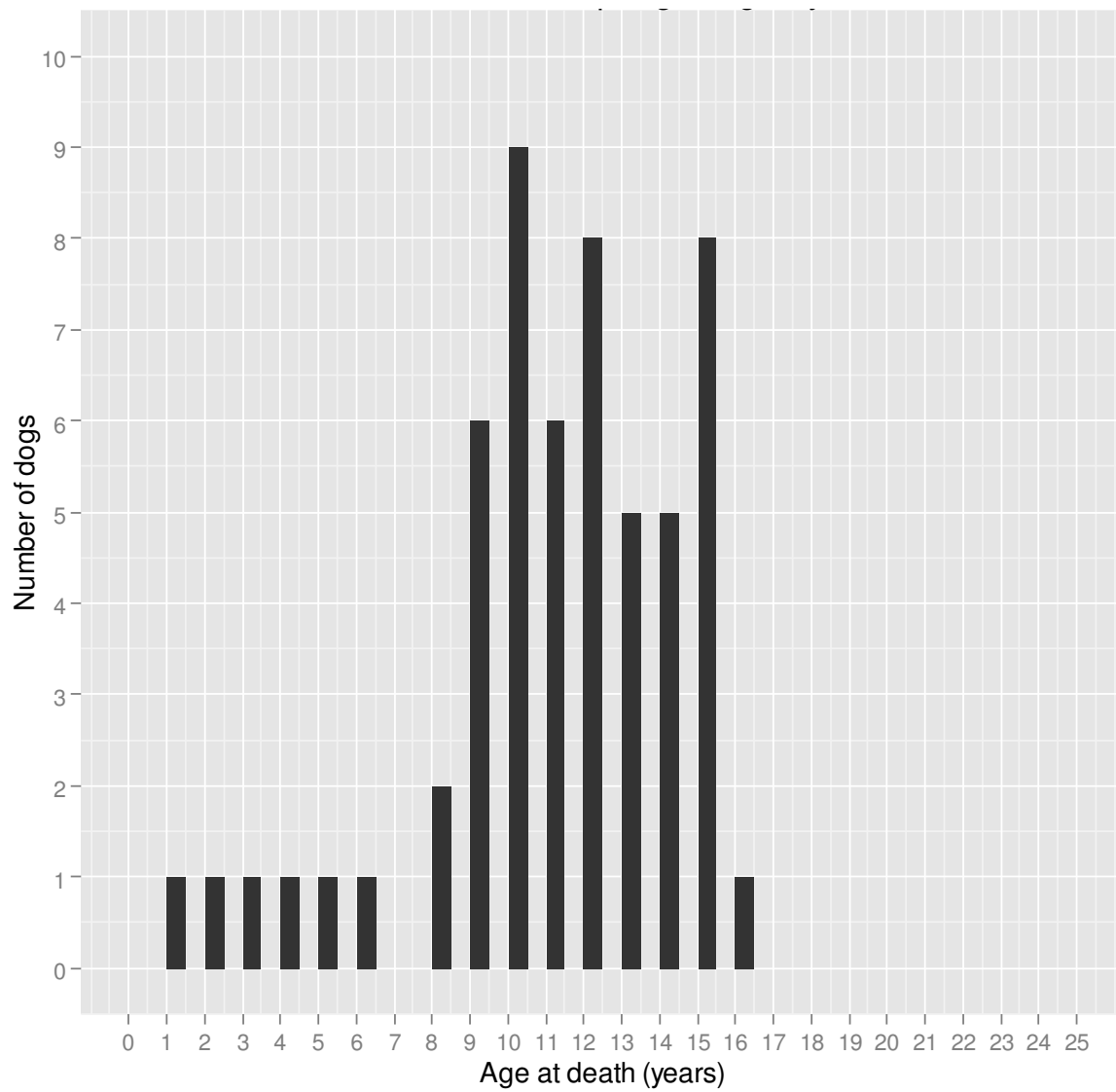


Figure 1: Histogram of the longevity for 56 reported deaths: overall median age at death was 11 years (minimum= 1 years, maximum= 16 years); mean age at death was 10.96 years

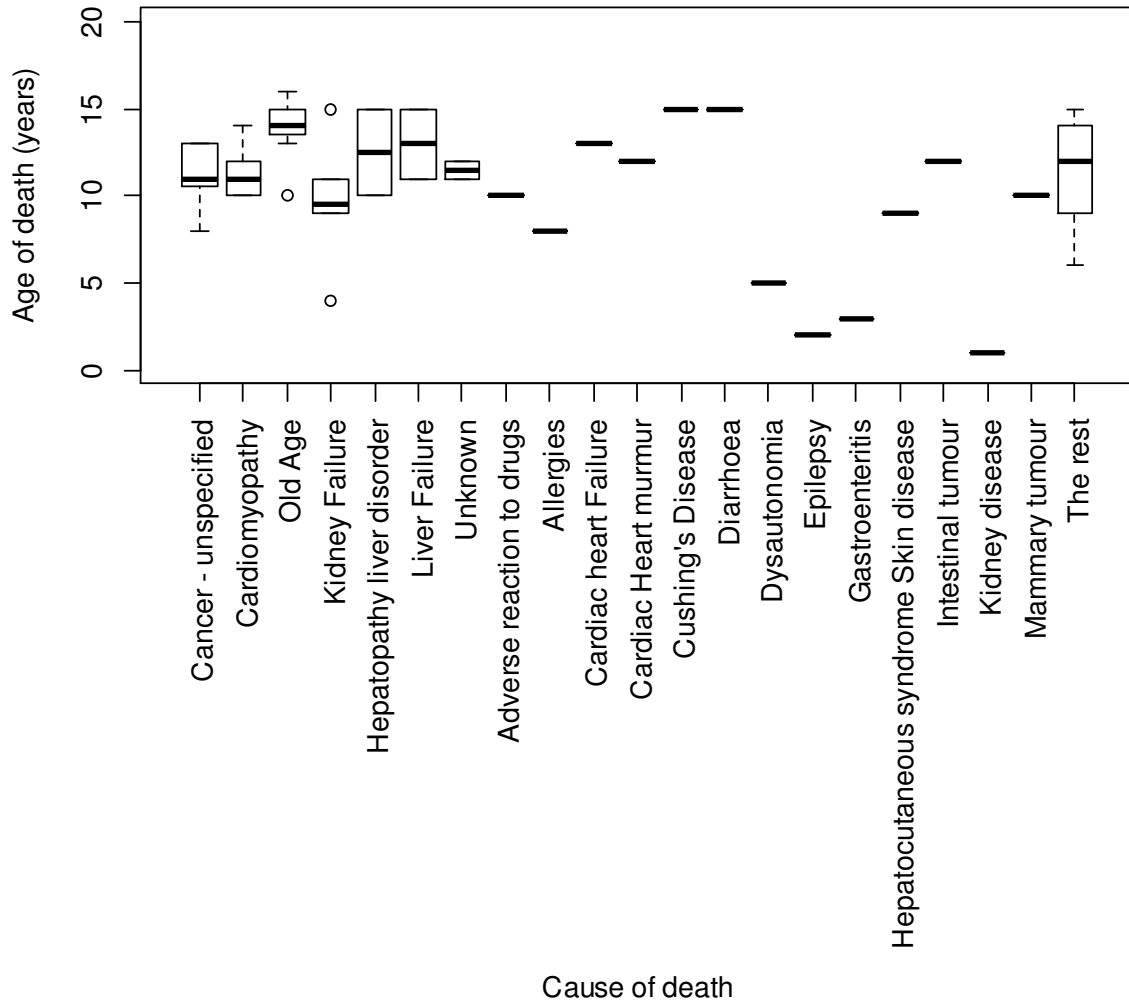


Figure 2: Box and whisker plot of age at death in years for the twenty most common causes of death (N=56). The solid line within each box represents the median age of death from the condition. The box represents 50% of the dogs and the whiskers represent 95% of the dogs for each condition. The circles (o) represent possible outliers

Morbidity results

The 360 live Shetland Sheepdogs represented 0.84% of total dogs in the survey. The median age of live dogs for the breed was 5 years (Table 2). Of the 360 Shetland Sheepdogs which the survey covers, 235 had reported no conditions and 125 reported affected by at least one condition (min = 1 condition(s), max = 7 conditions), giving a total of 230 incidents of conditions.

The gender, neuter status and age of neutering summary statistics for Shetland Sheepdogs are shown in Table 3. There were 291 dogs with responses for Body Condition displayed in Table 4.

The median age the dogs were first affected by a condition was 4 years (min = 0 years, max= 16 years, Figure 3). The ages for the most common conditions is displayed in Figure 4. Table 5 shows the frequency of occurrence of all reported disease conditions for the Shetland Sheepdog.

Table 2: The summary statistics for the dogs' current age when survey was completed

Number of Dogs	Mean age (years)	Median age (years)	Min age (years)	Max age (years)
360	5.27	5	0	16

Table 3: Gender, neuter status and age summary statistics for dogs where gender and neuter status was reported

Sex	Neuter status	Age known	Count	Mean age neutered (years)	Median age neutered (years)	Min age neutered (years)	Max age neutered (years)
Female	Neutered	Yes	99	2.32	1	0	10
Female	Neutered	No	1	NA	NA	NA	NA
Female	Not neutered	No	58	NA	NA	NA	NA
Female	Unknown	No	7	NA	NA	NA	NA
Male	Neutered	Yes	96	1.55	1	0	10
Male	Neutered	No	2	NA	NA	NA	NA
Male	Not neutered	No	91	NA	NA	NA	NA
Male	Unknown	No	6	NA	NA	NA	NA

Table 4: The body condition comment and the age of the dog when this comment was made

Body condition	Count	Mean age (years)	Median age (years)	Min age (years)	Max age (years)
No comment was made by vet	15	5.67	6	0	14
Normal	235	4.53	4	0	14
Somewhat overweight	31	5.90	6	2	12
Somewhat underweight	7	3.14	1	0	12
very overweight	1	2.00	2	2	2
Very underweight	2	9.50	9.5	6	13

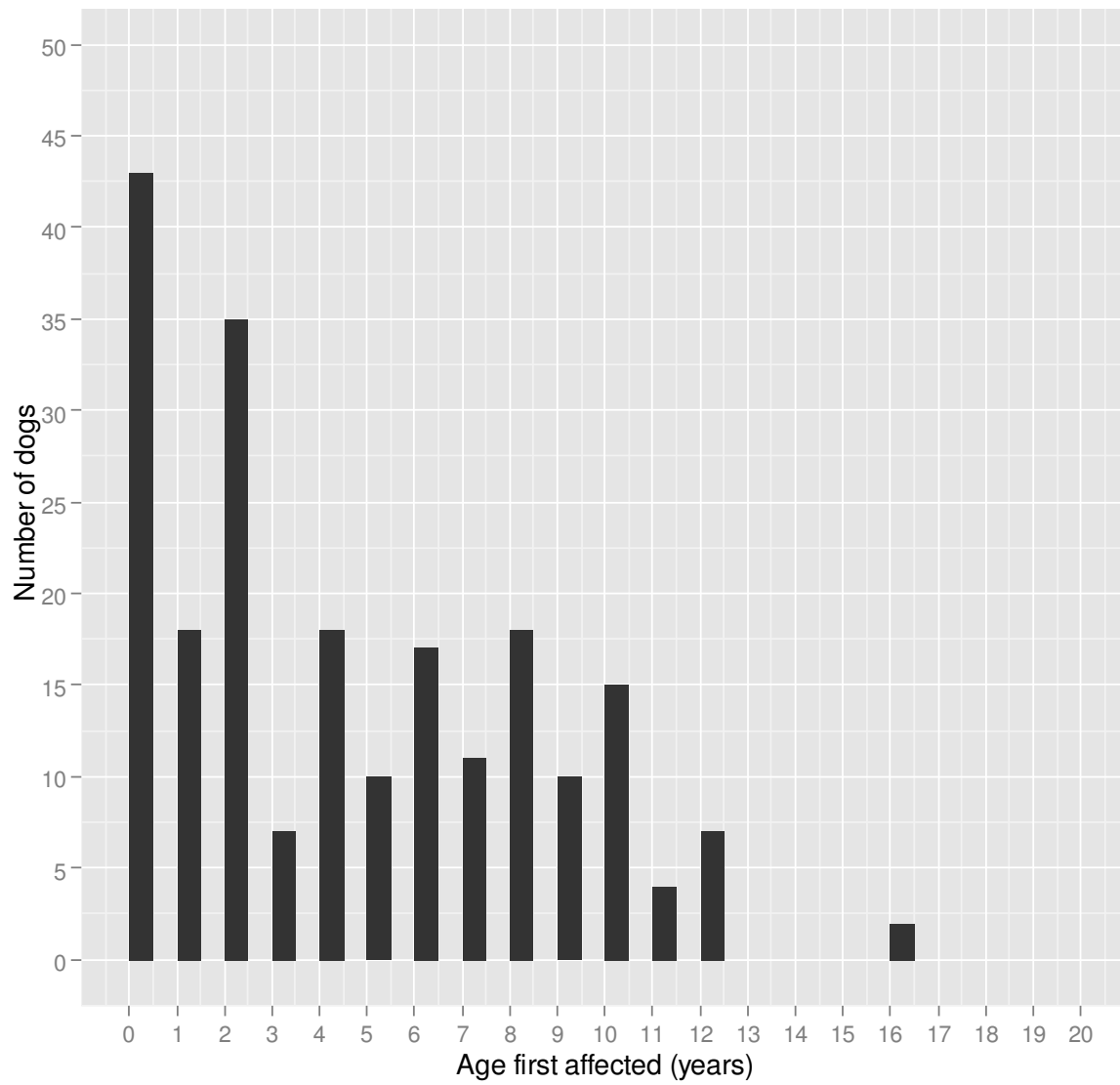


Figure 3: Histogram showing frequency of known age at diagnosis for the disease conditions reported

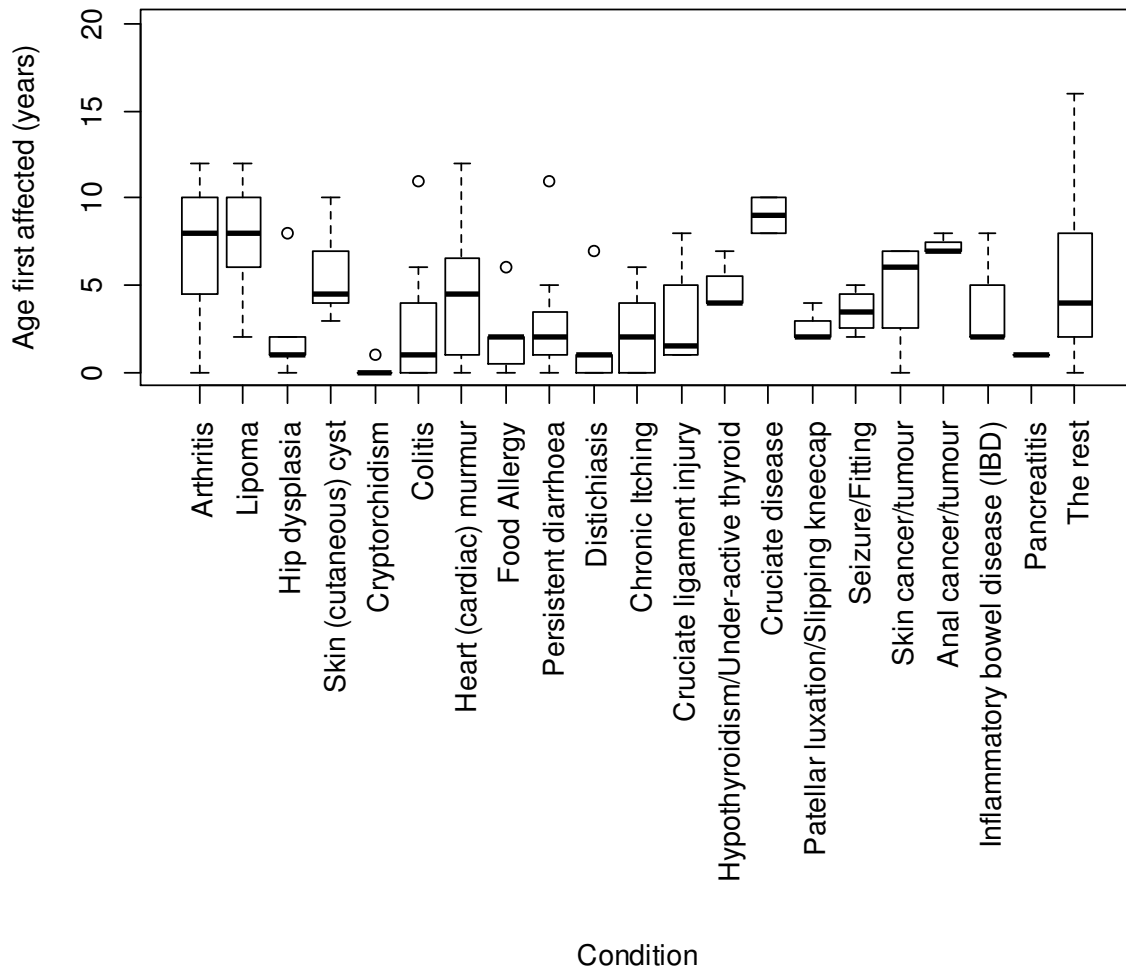


Figure 4: Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order. The solid line within each box represents the median age at diagnosis from the condition. The box represents 50% of the dogs and the whiskers represent 95% of the dogs for each condition. The circles (o) represent possible outliers

Table 5: The most commonly reported disease conditions in descending order for the breed (N = 360 live dogs)

Condition	Number of cases of disease	Proportion (%)	Prevalence (%)
Arthritis	16	6.96	4.44
Lipoma	16	6.96	4.44
Hip dysplasia	10	4.35	2.78
Skin (cutaneous) cyst	10	4.35	2.78
Cryptorchidism	9	3.91	2.50
Colitis	8	3.48	2.22
Heart (cardiac) murmur	8	3.48	2.22
Distichiasis	7	3.04	1.94
Food Allergy	7	3.04	1.94
Persistent diarrhoea	7	3.04	1.94
Chronic Itching	6	2.61	1.67
Cruciate ligament injury	5	2.17	1.39
Cruciate disease	4	1.74	1.11
Hypothyroidism/Under-active thyroid	4	1.74	1.11
Patellar luxation/Slipping kneecap	4	1.74	1.11
Seizure/Fitting	4	1.74	1.11
Skin cancer/tumour	4	1.74	1.11
Anal cancer/tumour	3	1.3	0.83
Hypersensitivity (allergic) skin disorder	3	1.3	0.83
Inflammatory bowel disease (IBD)	3	1.3	0.83

Proportion of morbidity as %= N/230 disease conditions, prevalence %= N/360 live dogs

Summary

From the dogs surveyed, most Shetland Sheepdogs were not affected by a disease condition (65.28%). There were two disease conditions that represented an equal proportion of affected live dogs; these conditions were food allergy and persistent diarrhoea. There were three causes of death that represented an equal proportion of the deaths; these causes were cancer (unspecified), cardiomyopathy, and old age.