

# Japanese Shiba Inu Health Survey 2022 Overall Summary

The top categories of diagnosis for health conditions reported in the survey are shown in the table below.

Table 1: Top categories of diagnosis for health conditions reported in the survey.

Body system	Number affected	Prevalence
Behaviour	177	30.3%
Skin and/or coat	68	12.7%
Muscles, bones and joints	62	11.5%
Eye	60	10.4%
Digestive	52	9.4%

The most frequently reported specific conditions are shown in Table 2 below.

**Table 2:** Top specific health conditions reported in the survey.

Specific condition	Number affected
Aggression	76
Nervousness/ fearfulness	73
General anxiousness	66
Resource (e.g. food) guarding	57
Ear infections - infrequent (e.g. one off)	33
Allergies (environmental e.g. grass pollen)	32
Other (please specify)	31
Conjunctivitis	31
Patellar luxation (dislocated kneecap)	30
Separation anxiety	28

# Japanese Shiba Inu Health Survey 2022

The Japanese Shiba Inu Health Survey ran during 2022. After removing all unusable responses (for example, four respondents did not consent to their data being used for research purposes and 11 respondents left all their answers blank) a total of 638 individual responses remained.

In total, 523 dogs were reported to be KC registered, 63 unregistered, 48 registered import and three not applicable/NA.

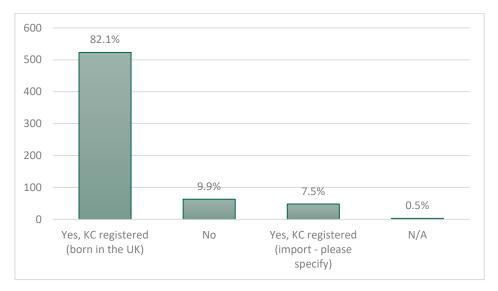


Figure 1: KC registered status of dogs included in the survey.

The top country for imported dogs was Russia (n=19), followed by Poland (n=7), Unknown (n=4), Ireland (n=4), and three each for Czech Republic, Japan, Latvia and the Netherlands.

When asked where the owner sought their dog from, the top option selected was "from a breeder". The other responses are shown in Figure 2 below.

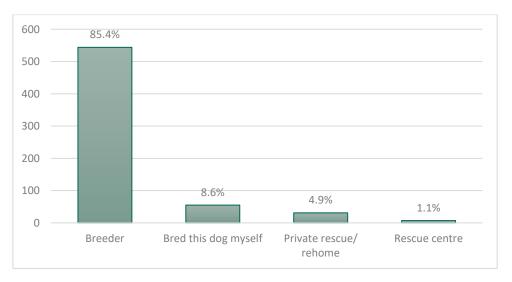


Figure 2: Where owners reported they got their dog from.

Figure 3 shows a full breakdown of the age of the dogs being reported for in the survey (n=637).

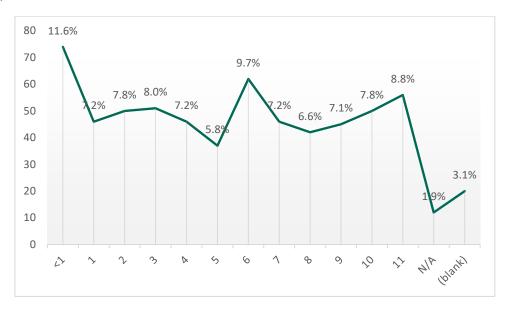


Figure 3: Date of birth of the dogs included in the survey.

When asked the sex of their dog, 342 (55.4%) were male and 275 (44.6%) were female. When asked the neutered status of their dog, 289 (46.8%) were entire and 328 (53.2%) were neutered. Results are shown in Table 3.

	Neutered Status		Total
Sex	Entire	Neutered	
Male	169 (27.4%)	173 (28.0%)	342
Female	120 (19.4%)	155 (25.1%)	275
Total	289	328	617

 Table 3: Sex and neutered status of the dogs included in the survey.

In terms of breeding, out of 341 response, 33 (9.7%) dog owners reported that their dog had been used at stud, and of these dogs 17 (51.5%) had been used 1-5 times, seven (21.2%) not known, six (18.2%) 5-10 times, two (6.1%) 10-20 times, and one dog 20-50 times.

For bitches, 216 (78.8%) of 274 reported dogs had not been bred from. Of the 58 that had been used in breeding, 26 (44.8%) had been bred once, 10 (17.2%) an unknown number of times, eight (13.8%) twice, eight (13.8%) 3 times, four (6.9%) 4 times, and two (3.4%) more than 4 times.

Of all the dogs included in the survey, the most common colour was red (69.9%, 431 of 617). A full breakdown of responses by colour are shown in Figure 4.

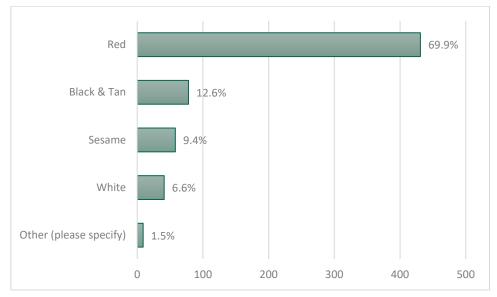


Figure 4: Colour of Japanese Shiba Inu included in the survey, as reported by their owners.

For "other" the responses reported were: dirty red (n=3), red sesame (n=3), and one each for red carrying black and tan, red with black tips and sesame black tpis.

# <u>Lifestyle</u>

Owners were asked to report where their dog spent most of their time during the day and night, with this shown in the figure below. Overall the majority of dogs spent their day both inside and outside (47.7%, n=280), and inside at night (92.8%, n=545).

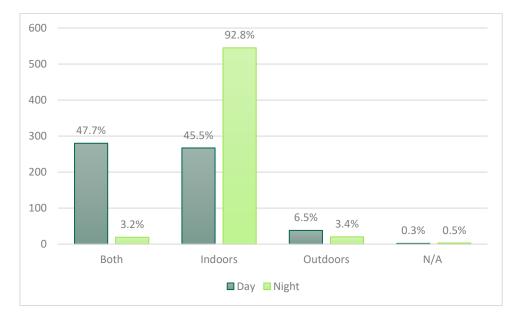


Figure 5: Where Japanese Shiba Inu included in the survey were reported to spend their time.

Next, owners were asked to report whether their dog suffered from any environmental allergens, of which 78 (13.3%) out of 587 respondents replied yes. The most common reported allergen was pollen, which affected 34.6% (n=45) of the affected dogs.

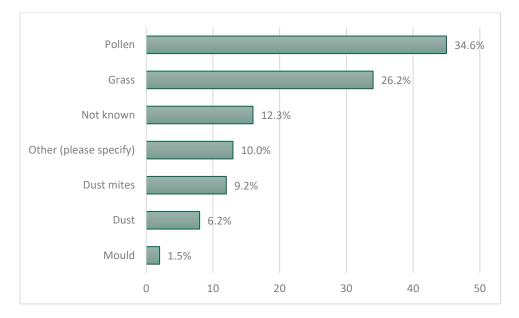
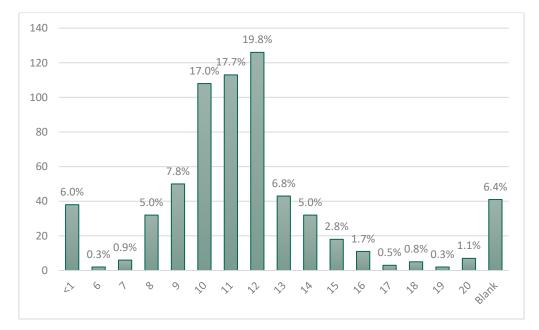


Figure 6: Symptoms of skin and/or coat disorders reported.

Of the owners that reported "other", the provided responses were: seasonal itching/ allergies (n=3), two responses for each of the following: seasonal pollen, not known, and storage mites, and then one response for each of ear infections, fleas, grass seeds, spray chemicals, plants – unspecified, and plantain.

# **Diet and activity**

When asked the weight of their dog, the median in kilograms was 11, range 0-20. The full spread of reported weights are given below.



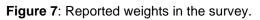


Figure 8 shows how active the dogs included in this survey were considered to be, with the majority considered to be moderately active (55.6%, 333 of 599).

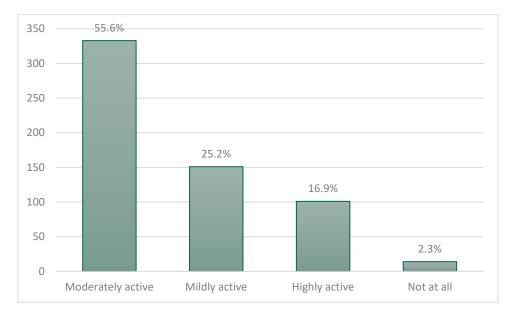


Figure 8: Activity levels of dogs included in the survey, as perceived by their owners.

When asked what type of foods owners fed their dogs, the most commonly selected was a grain-fee kibble (25.1%, n=281), out of a total of 1,118 options selected.

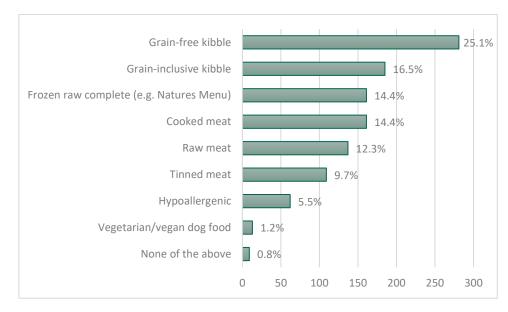


Figure 9: Type of food provided to dogs reported for in the survey.

Of those who fed meat, the most popular type was chicken (19.2%, n= 496) out of a total of 2,587 options selected.

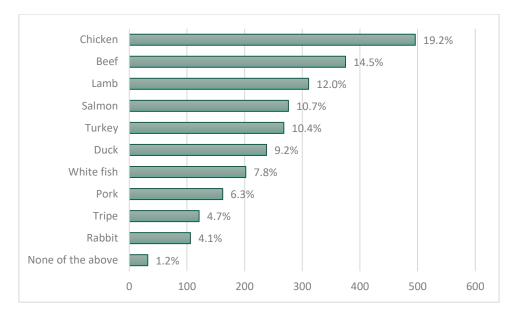


Figure 10: Type of meat provided to dogs reported for in the survey.

Owners were then asked to report whether their dog was affected by a dietary allergy. Out of 590 responses, 48 (8.1%) replied yes. Of these 48 dogs, the most common allergy was chicken (n=20), with the remaining allergens shown in the figure below.

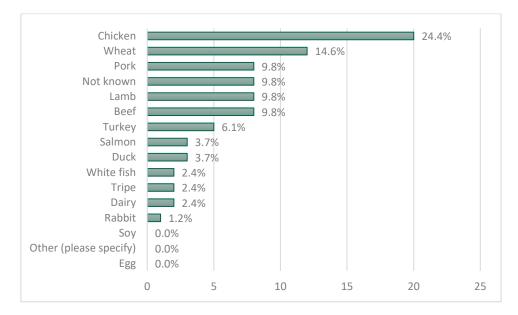


Figure 11: Dietary allergens reported in the survey.

## **Health**

The survey investigated the number of dogs affected by specific conditions within different categories. Within each of these categories, the respondents were given a choice of specific conditions, the choices of "not known" and "other" were also given.

The data collected for Table 4 represents the total number of conditions selected by respondents about their dog. 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 affected dogs in that category.

The total number of specific conditions reported in this survey was 869. Out of these conditions reported 30.3% were for 'behavioural', 12.7% were for 'skin and/or coat', and 11.5% were for 'muscles, bones and joints'. The results for each category are given below.

Body system	Number of dogs affected/ Total number of dogs	Prevalence	Number of specific conditions reported
Behaviour	177	30.3%	381
Blood (haematological)	2	0.4%	2
Breathing	8	1.5%	4
Cancerous	21	3.8%	21
Dental	44	8.3%	45
Digestive	52	9.4%	83
Eye	60	10.4%	69
Heart	16	3.0%	25
Hormonal	7	1.3%	9
Immune	1	0.2%	1
Kidney	15	2.8%	15
Liver	1	0.2%	1
Muscles, bones and joints	62	11.5%	70
Neurological/ spinal	23	4.1%	25
Reproductive	20	3.7%	25
Skin and/or coat	68	12.7%	93

 Table 4: Overall summary of health conditions by body system/ category, as reported in the survey.

## **Behavioural conditions**

When asked if their dog has ever suffered from a behavioural problem(s), out of 585 responses, 177 (30.3%) answered "Yes".

The total number of individual behavioural problems reported was 381. Of these, the most commonly reported condition was "aggression" (n=76, 19.9%). The remaining reports are given in Figure 12 below.

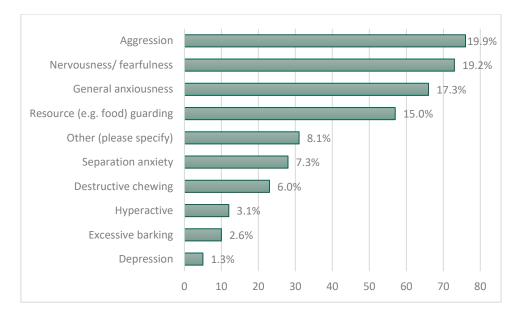


Figure 12: Behavioural problems reported in the survey.

The answers to "other" are shown in the table below.

**Table 5**: Other behavioural problems as reported in the survey.

Other behavioural problem reported	Count	Proportion
Aggressive/ reactive towards animals/ other dogs	11	28.9%
Fearful of vets	4	10.5%
Escapes	3	7.9%
Resource guarding	2	5.3%
Dominant towards other dogs	2	5.3%
Fearful of car	2	5.3%
Fearful of fireworks	2	5.3%
Barking towards people	1	2.6%
Dislikes other dogs	1	2.6%
Coprophagia	1	2.6%
Aloof towards strangers	1	2.6%
Lack of intelligence	1	2.6%
Unmanageable	1	2.6%
Counter-surfing	1	2.6%
Growls - unspecified	1	2.6%
Fear of harness	1	2.6%
Pees/ marks on beds	1	2.6%
Poor recall	1	2.6%
Very wilful	1	2.6%
TOTAL	38	

Owners were then asked whether their dog's behavioural problem had required veterinary intervention, of which 17 (9.7%) of owners reported yes. For these dogs, the most common reason for needing veterinary attention was for anxiety (n=4).

## **Blood (haematological) conditions**

When asked if their dog has ever suffered from a breathing condition(s), out of 533 responses, two (0.4%) answered "Yes".

The two responses were for low platelet count (affected at 3 years), and pancytopenia (affected at 13 years).

## **Breathing conditions**

Eight dogs (1.5%) were reported to be affected by a breathing condition, with the reported conditions being coughing - unspecified (n=3), reverse sneezing (n=2), problems secondary to a heart condition (n=2), and one report of old-age – unknown.

## **Cancerous conditions**

Twenty-one (3.8%) owners responded that their dog had been affected by a cancerous/ mass condition, with the most common being lipoma (fatty lump). All reported lumps/ cancers are shown in the figure below.

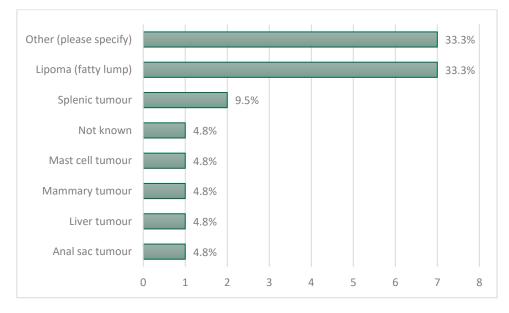


Figure 13: Cancerous conditions reported in the health survey.

For other, one report was received for each of the following: cyst on face, lump on paw, histoma, nasal adenocarcinoma, non-cancerous upper gum mass, sinus, mammary gland lump/ mass, and unknown growth on lip.

The median age of affected dogs was 10 years of age (range 0-15), with the spread shown below.

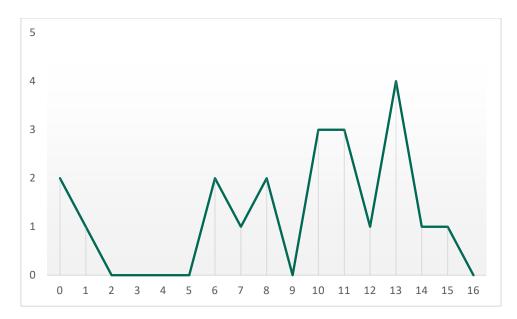


Figure 14: Age affected by a cancerous condition reported in the health survey.

## **Dental conditions**

When asked if their dog has ever suffered from a dental condition, out of the 533 responses, 44 responded "Yes" (8.3%). A total of 45 conditions were reported, with these shown in the figure below.

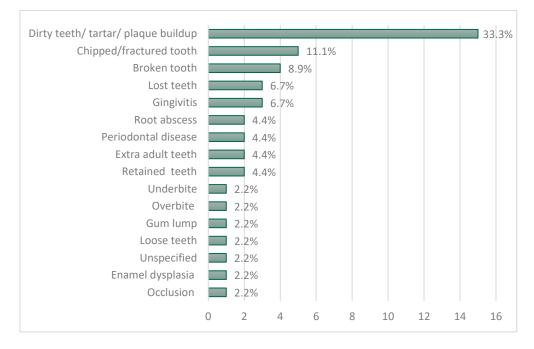


Figure 15: Dental conditions reported in the health survey.

# **Digestive/ gastrointestinal conditions**

When asked if their dog has ever suffered from a digestive condition(s), out of 550 responses, 52 (9.5%) responded yes. In total, 83 individual digestive conditions were reported, with the most common being sensitive stomach (n=17). The full list of provided digestive conditions are provided below.

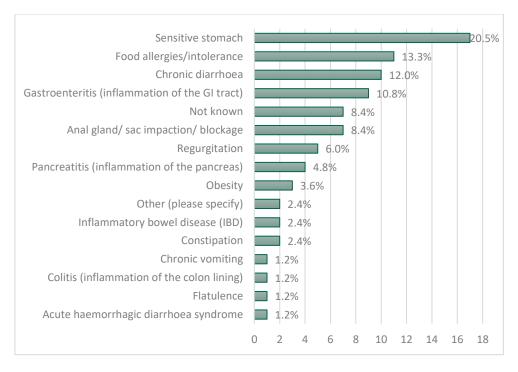


Figure 16: Digestive conditions reported in the health survey.

For other, the top conditions were giardiasis (n=2), and one report for leaky gut syndrome, and puppy inappetence, respectively.

The median age when affected by their digestive condition was one years of age (range 0-13), as shown in the figure below.

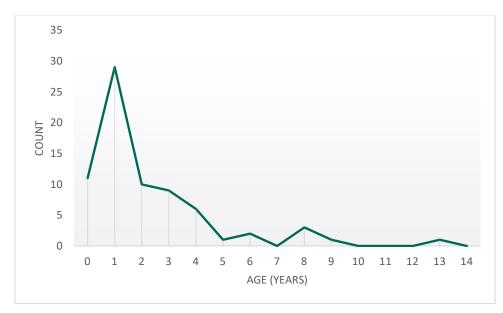


Figure 17: Age affected by a digestive condition reported in the health survey.

Finally, owners were asked if the condition was consistent, intermittent, or a one-off occurrence, with the majority (47.9% out of 71 responses) of owners reporting this as an intermittent problem.

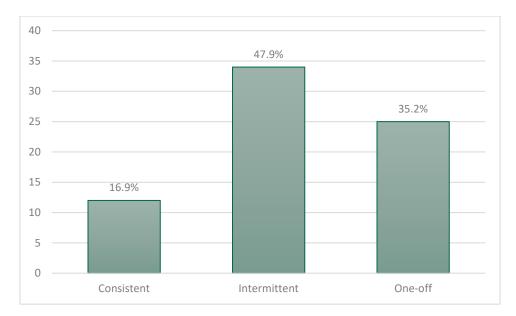


Figure 18: Length of digestive conditions as reported in the health survey.

On-going treatment was required for 43.7% of the 71 dogs reported for.

## **Eye conditions**

When asked if their dog has ever suffered from an eye condition(s), out of the 576 responses, 60 (10.4%) answered "Yes".

The total number of individual eye conditions reported was 69. Of these, the most commonly reported condition was conjunctivitis, with the other reported conditions shown in the figure below.

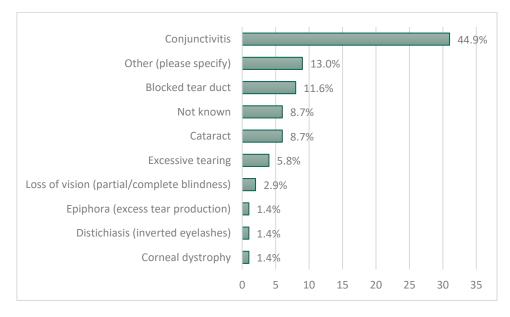


Figure 19: Eye conditions reported in the health survey.

For the other reported conditions, the most common was grass/ pollen allergy (n=3), followed by excessive tearing (n=2), and one report each for: age-related retinal degeneration, foreign object, goniodysgenesis, eyelid lesion, and corneal cloudiness.

Owners were then asked whether their dog had been tested under the BVA/KC/ISDS Eye Scheme. Out of 570 responses, 115 (20.2%) responded yes. A further 77.6% (n=90) of these dogs that had been tested under the scheme were confirmed to have been gonioscopy tested.

In terms of the median age when affected, this was three years, range 0 to 16 years. The full spread of ages is shown in the graph below.

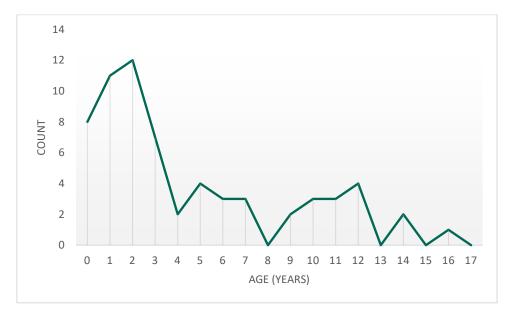


Figure 20: Age affected by an eye condition as reported in the health survey.

## **Ear conditions**

In total, 68 dogs were reported to be affected by an ear condition (12.5%) out of 545 responses. Overall, 82 conditions were reported for this category. The most common condition reported was infrequent ear infections (40.2%, n=33)

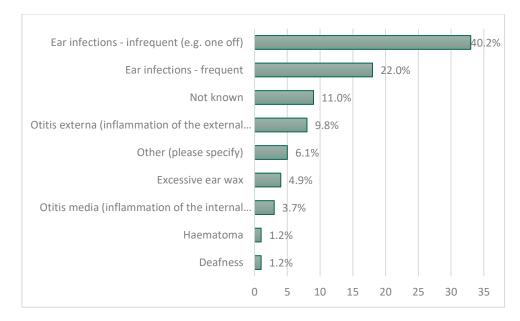


Figure 21: Ear conditions reported in the survey.

For other, there were two reports for excessive ear wax and a vestibular episode/ infection, and one report for each of the following: allergy-related infection, infection following swimming, impacted fur, ear infection and yeast infection.

In terms of the median age when affected, this was five years (range 0-15). The spread of ages is shown below.

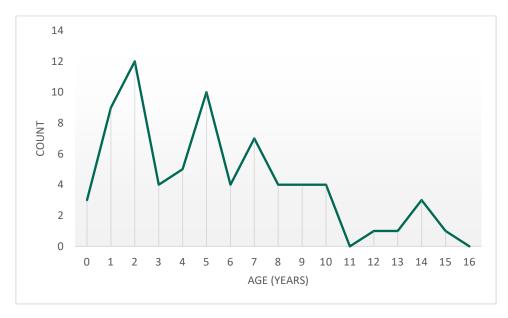


Figure 22: Age affected by an ear condition as reported in the survey.

## Heart conditions

Out of 542 responses, 16 (3.0%) of dogs were reported to have been affected by a heart condition.

The most commonly reported condition was heart murmur, affecting 12 (48.0%) of the reported cases.

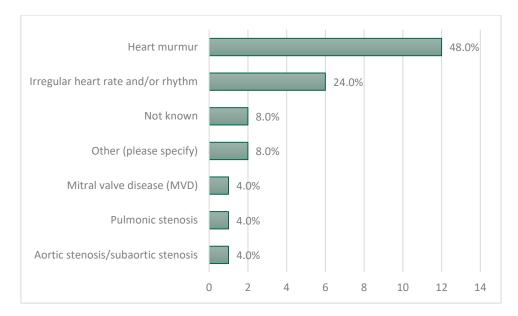


Figure 23: Heart conditions reported in the survey.

For other, the reported conditions were one for each of the following: hole in the heart, damage secondary to heartworm infection, and needed a pacemaker fitted.

The median age when affected was three years of age (range 0-15).

## **Hormonal conditions**

Seven dogs were reported to be affected by a hormonal condition, of which six were for hypothyroidism, two for other and one for not known. Only response was provided for other, which was for urinary incontinence following a spay.

## Immune system conditions

In total two dogs (0.4%) were reported to be affected by an immunological condition, with both of these being for grass allergies, and both being affected at approximately one years of age.

## Kidney and/or bladder conditions

When asked if their dog has ever suffered from a kidney and/or bladder condition(s), out of the 540 responses, 15 (2.8%) answered "Yes". The reported conditions are shown below, with the top being urinary tract infections (n=4) and kidney failure (n=4).

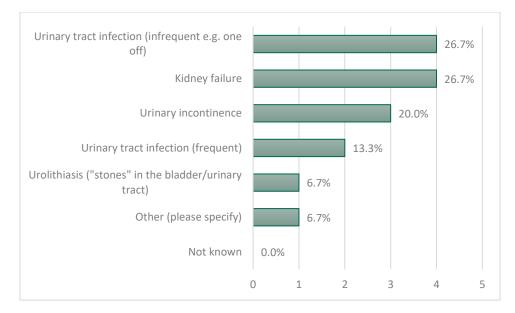


Figure 24: Kidney conditions reported in the survey.

The report for other was spay incontinence.

The median age of affected dogs was seven years (range 1-15), with the spread shown below.

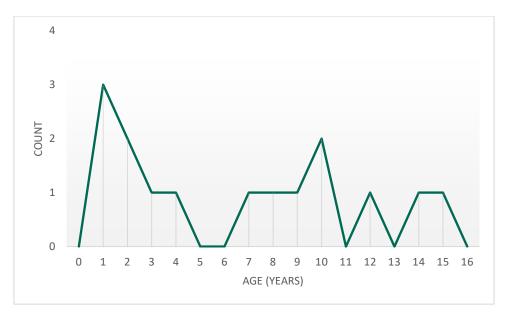


Figure 25: Age affected by a kidney condition as reported in the survey.

## **Liver conditions**

One owner reported a liver condition in their dog, for portal vein hypoplasia at six years old.

# Muscle, bone and joint conditions

When asked if their dog has ever suffered from a muscle, bone or joint condition(s), out of 539 responses, 62 (11.5%) answered yes.

Of these, a total of 69 conditions were reported, with the top being patellar luxation. The remaining reported conditions can be seen in the figure below.

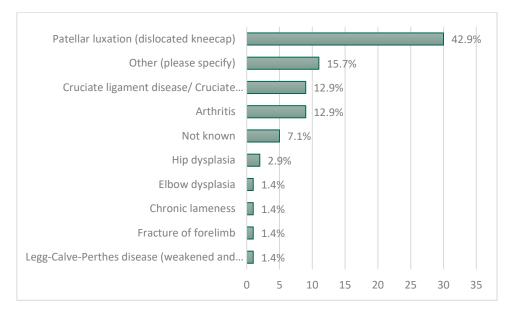
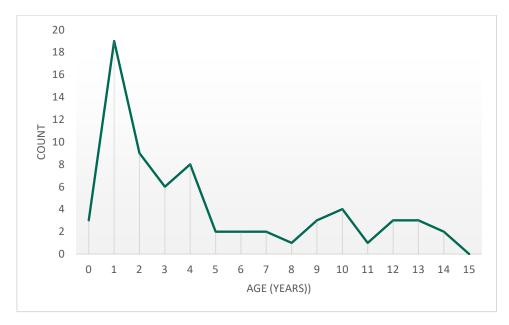


Figure 26: Musculoskeletal conditions reported in the survey.

The other reported conditions were: unknown forelimb lameness (n=3), and one for each of the following: arthritis, hip dysplasia, malformed toes, congenital deformation, unknown, patellar luxation, pulled muscle, slipped disc, cruciate disease, stuck sacrum, trauma/injury, and a strained muscle.

When asked if the owner knew of a particular event that triggered their dog's condition (i.e. an injury) 62 owners replied, of which 13 (26.5%) replied "yes".

The median age of affected dogs at their first diagnosis was three years (range 0-14).





## Neurological and spinal conditions

In total, 23 (4.1%) of dogs were reported to be affected by a neurological condition. The most commonly reported specific condition was epilepsy (n=5), with the full list of reported conditions shown below.

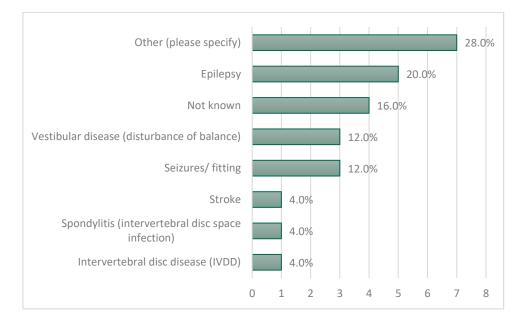
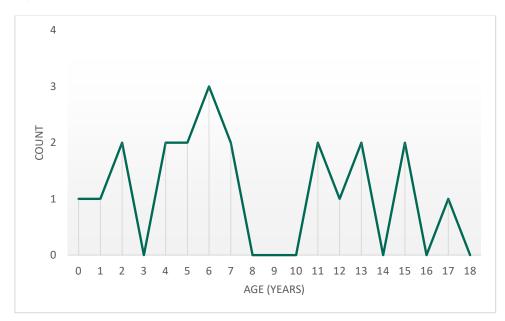
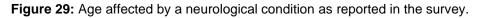


Figure 28: Neurological conditions reported in the survey.

For other, the top condition reported was canine cognitive dementia (n=2), followed by one report for each of the following: mild tic, restricted forelimb movement, mouth chomping, movement disorder – unspecified, spinal – unspecified, IVDD, kyphosis/ scoliosis, and suspected olfactory hallucinations.

In terms of the median age when affected, this was six years of age (range 0-17), with the full spread provided below.





Finally, owners were asked to reported whether their dog had been DNA tested for gangliosidosis (type 1 and 2/ GM1 and GM2). In total, 10.7% (n=53) of dogs were reported to have been GM1 DNA tested, with all of these clear (i.e. carry no copies of the mutation). Similarly, 10.5% (n=51) of dogs had been GM2 tested, and were all clear.

## **Reproductive conditions**

When asked if their dog has ever suffered from any other hormonal condition(s), out of the 537 responses, 20 (3.7%) answered "Yes".

In total, 25 dogs were reported to be affected by a condition, with the most common being fertility problems (n=8). The other reported conditions are shown below.

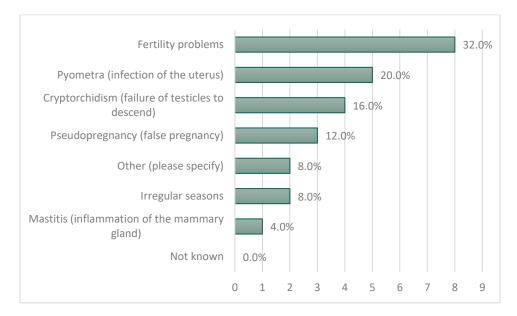


Figure 30: Reproductive conditions as reported in the survey.

Of the other reported conditions there was one report for each of the following: narrow birth canal leading to dystocia, presence of mycoplasma at the kennels, and undescended testicles.

The median age of affected dogs was two years (range 0-10).

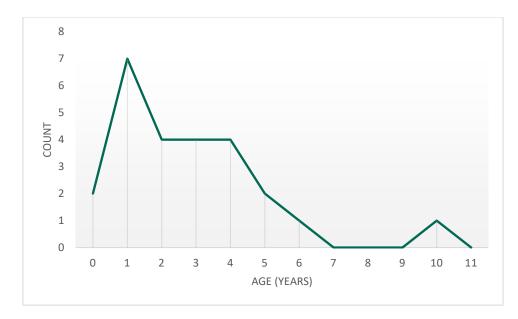


Figure 31: Age affected by a reproductive condition as reported in the survey.

## Skin and/or coat conditions

When asked if their dog has ever suffered from a skin and/or coat condition, a total of 536 responses were received, of which 68 owners replied "yes".

Owners were asked to report the symptoms that had alerted them to their dog's skin condition, with the most common being itching/ chewing (42.8% of 138 reported symptoms).

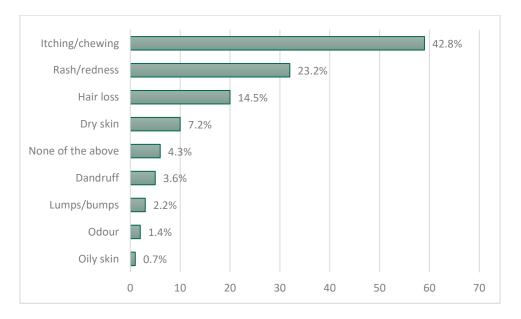


Figure 32: Skin symptoms reported in the survey.

In total 93 conditions were reported, of which the most common was allergies (environmental). The remaining conditions are shown below.

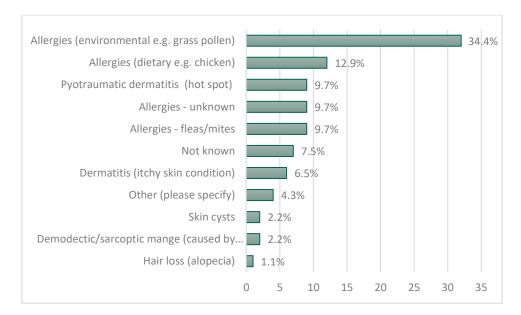


Figure 33: Skin and/or coat conditions as reported in the survey.

The other reported skin conditions were two reports for hot spots (n=2), chewing paws, interdigital skin growth/ cysts, and not known.

The median age of affected dogs was two years (range 0-14).

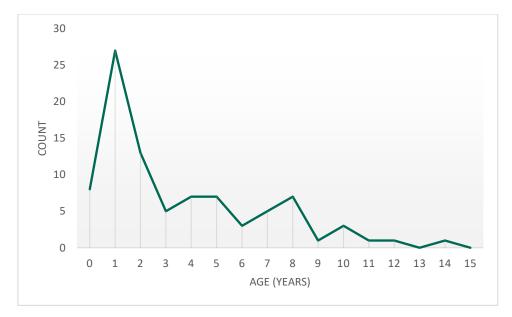
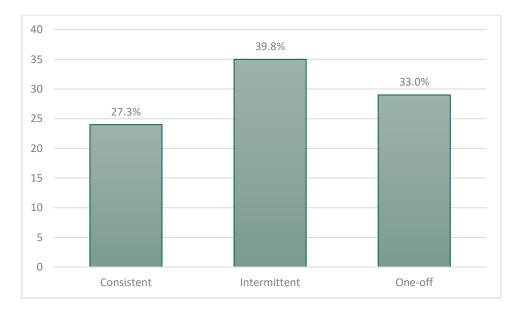
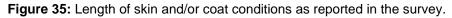


Figure 34: Age affected of a skin and/or coat conditions as reported in the survey.

Finally, owners were asked if their dog's condition had been intermittent, consistent, or a one-off occurrence. In total, the majority of owners (n=88) responded that their dog's skin condition intermittently affected their dog (39.8%). Further, 56.5% of 85 owners reported that their dog required on-going treatment to effectively manage their condition.





## Additional conditions not listed in survey

The respondents were provided with the opportunity to note any conditions not already covered by the previous questions. An additional 19 conditions were reported, with these shown in Table 5 below.

Condition	Count	Condition	Count
Anal gland disorder - unspecified	4	Hay fever	1
Dementia/ canine cognitive disorder (CCD)	2	Anal gland impaction	1
Seizures/ fitting	2	Leptospirosis infection	1
Kennel Cough	2	Noise anxiety/ fearfulness	1
Unknown	1	Irritable bowel disease	1
Extreme touch sensitivity	1	Viral infection	1
Reluctance to eat	1	Urinary tract infection	1

## **Deaths**

In total 23 deaths were reported, with the most commonly reported being due to old age (n=7). The remaining causes of death are shown in the figure below.

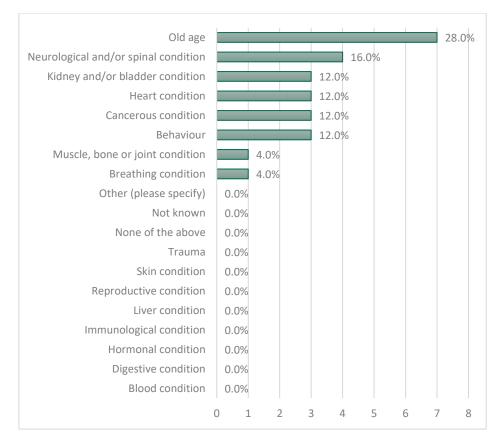


Table 36: Causes of death reported in the survey.

The specific causes of death reported are shown below.

Condition	Count	Condition	Count
Kidney failure	3	Not specified	1
Dementia/ canine cognitive dementia (CCD)	2	Spinal condition – unspecified	1
Behavioural – mixed	2	Heart failure secondary to congenital heart defect	1
Cancer – unspecified	1	Congenital leaky heart valve	1
Stroke	1	Natural causes	1
Arthritis	1	Sinus/ nasal cancer	1
Epilepsy	1		

Table 7: Specific causes of death reported in the survey.

In terms of the median age at death, this was 14 years 1 month (range 0 - 17 years six months). The spread of age at death is shown below, with the majority being at around 15 years of age.

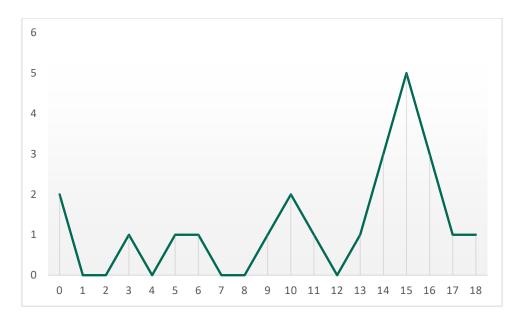


Figure 37: Age of death as reported in the survey.