DachsLife 2021

The DachsLife 2021 health survey ran from 01/02/2021 to 31/03/2021. After removing all unusable responses (for example, respondents did not consent to the Dachshund Breed Council and The Kennel Club using the data for research purposes) a total of 9,908 individual responses remained. Of the 9,908 dogs this represented, 7,853 (79.3%) were KC registered and 1,810 (18.3%) were not KC registered.

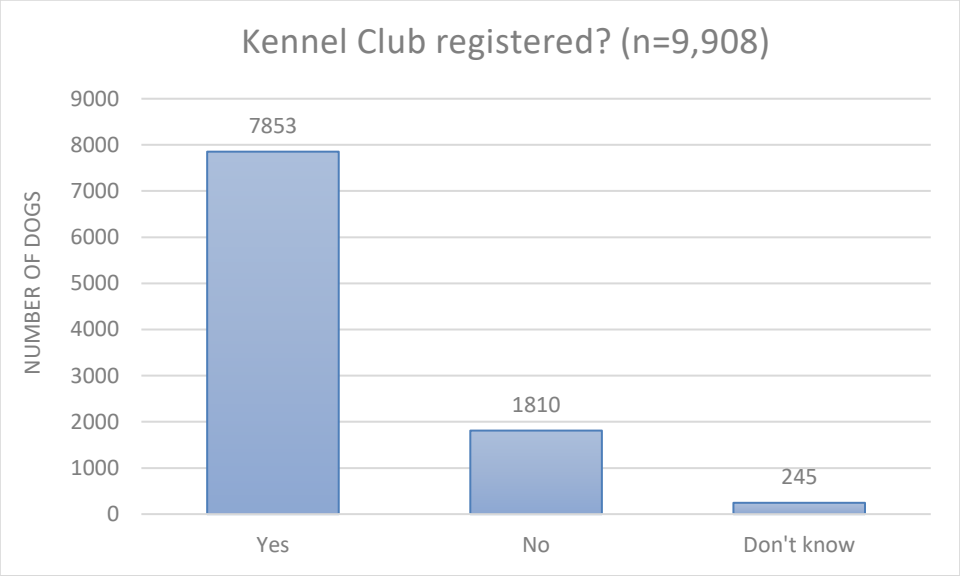

Figure 1: Kennel Club registration status, as reported in the survey

Figure 2 shows where the owners got their Dachshund from, with the majority being from a breeder (86.1%, 8,527 of 9,908).

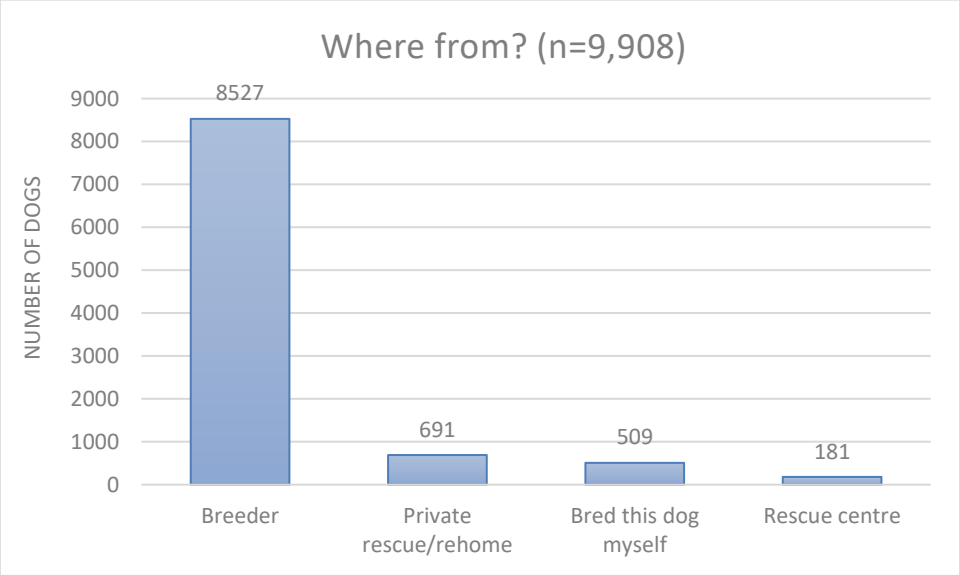

Figure 2: Where the Dachshunds included in the survey were from, as reported in the survey

The median age of the dogs included in the survey was 4 years. Figure 3 shows a full breakdown of the dog's ages in years.

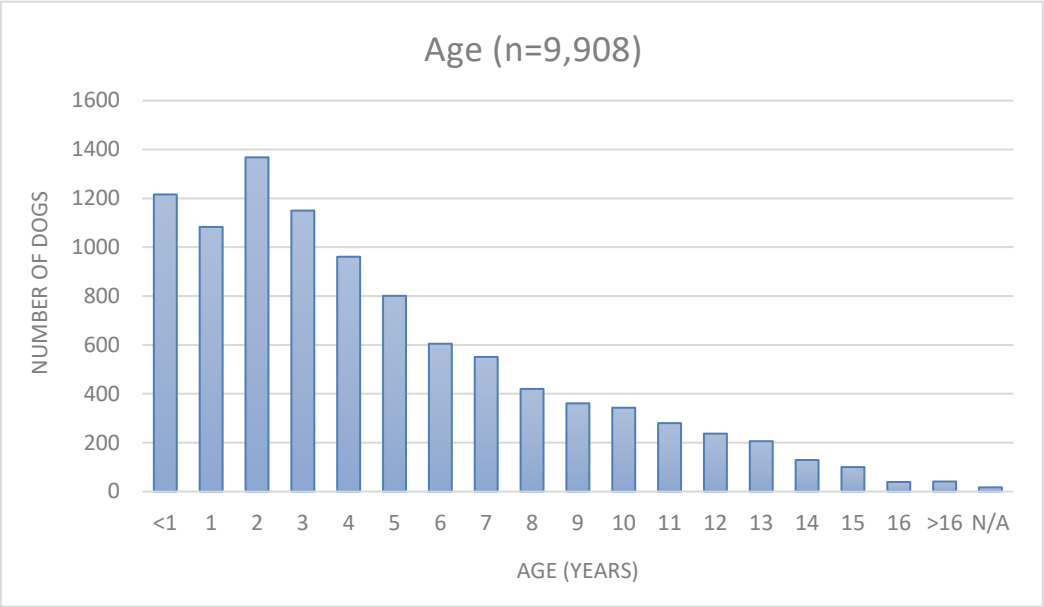

Figure 3: Age of Dachshunds included in the survey

Of 9,908 dogs, 5,292 (53.4%) were male and 4,616 (46.6%) were female. Across sexes, 5,055 (51.2%) were entire and 4,819 (48.8%) were neutered. A full breakdown of results are shown in Table 1.

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

Sex	Neutered Status				Total
	Entire	Neutered	Don't know	Unanswered	
Female	2,212 (48.1%)	2,388 (52.1%)	15	1	4,616
Male	2,843 (53.9%)	2,431 (46.1%)	18	0	5,292
Total	5,055	4,819	33	1	**9,908**

Figure 4 shows the dog's age when neutered as reported by their owners, with the majority neutered between 6 months and 1 year for both males (37.1%, 901 of 2,431) and females (30.8%, 735 of 2,388).

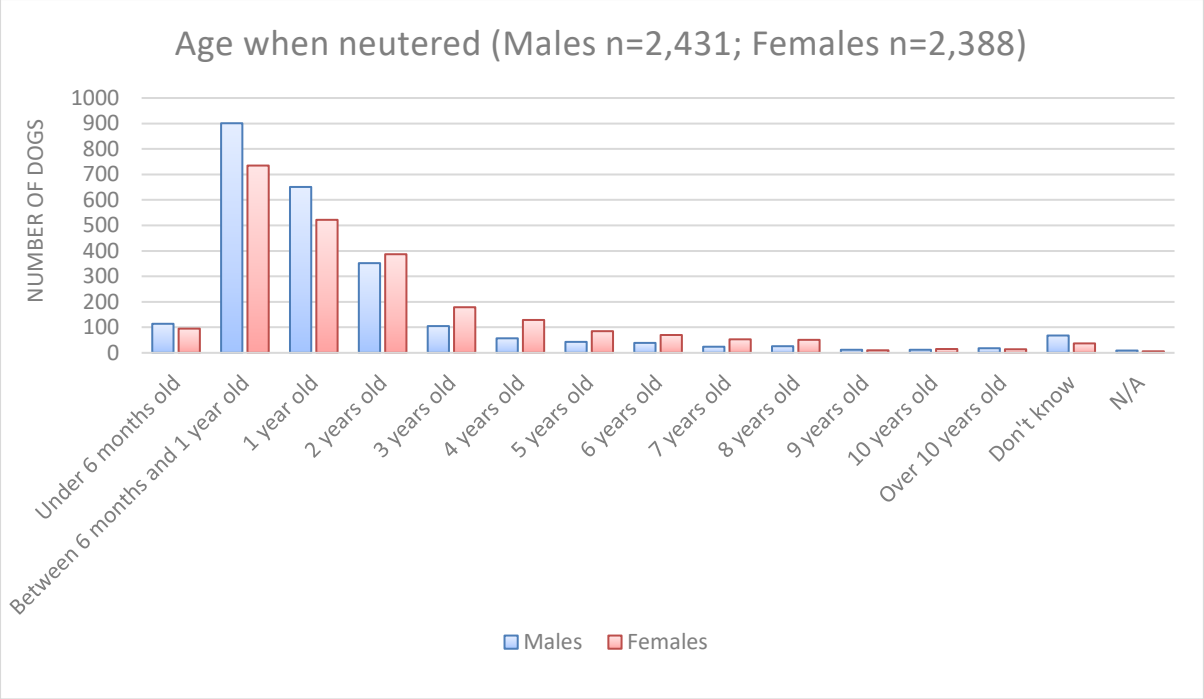

Figure 4: Age of neutering, as reported in the survey

The majority of the Dachshunds included in the survey were Miniature Smooth Haired (52.3%, 5,125 of 9,807). A full breakdown of responses by variety are shown in Figure 5.

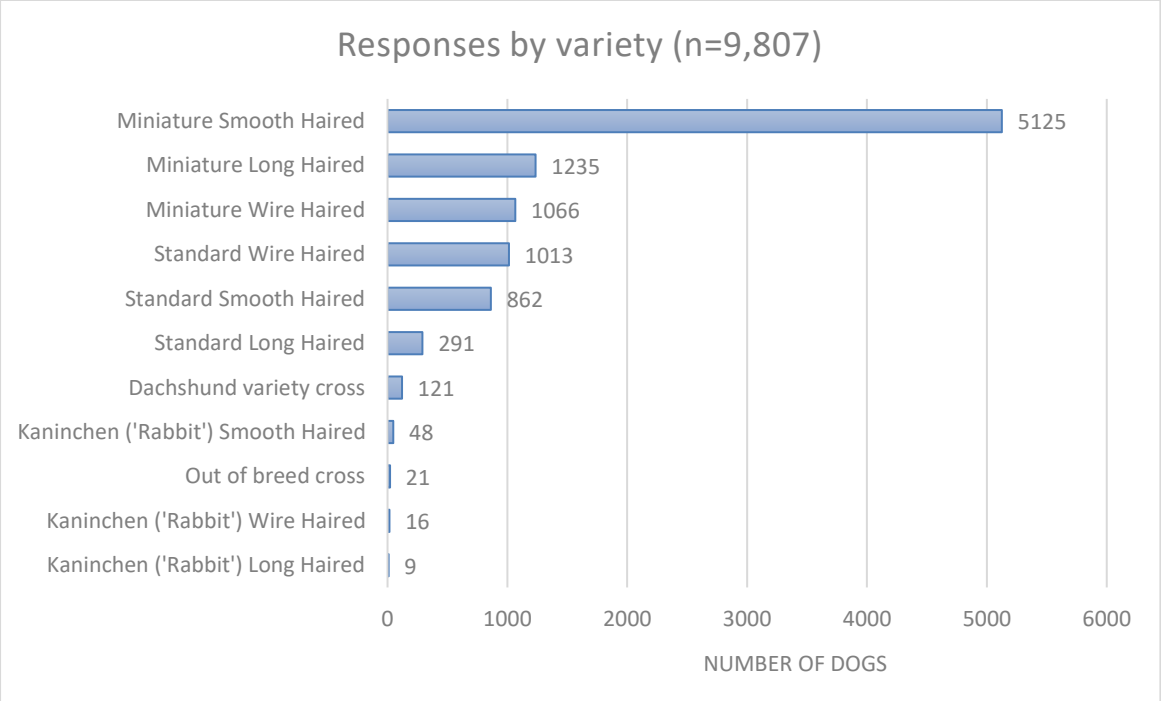

Figure 5: Variety of Dachshunds included in the survey, as reported by their owners

The majority of the Dachshunds included in the survey were black & tan (33.8%, 3,313 of 9,807). A full breakdown of responses by colour are shown in Figure 6.

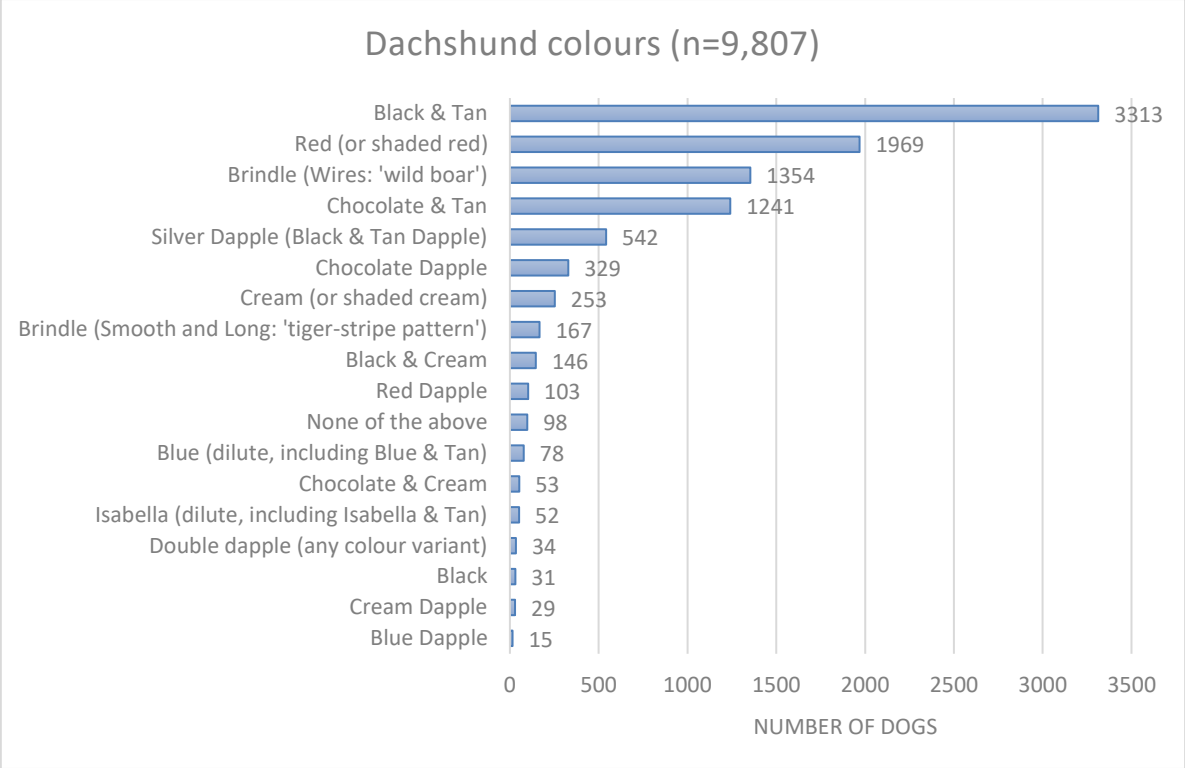

Figure 6: Colour of Dachshunds included in the survey, as reported by their owners

The majority of the Dachshunds included in the survey had a solid coat pattern (37.7%, 3,700 of 9,807). A full breakdown of responses by coat pattern are shown in Figure 7.

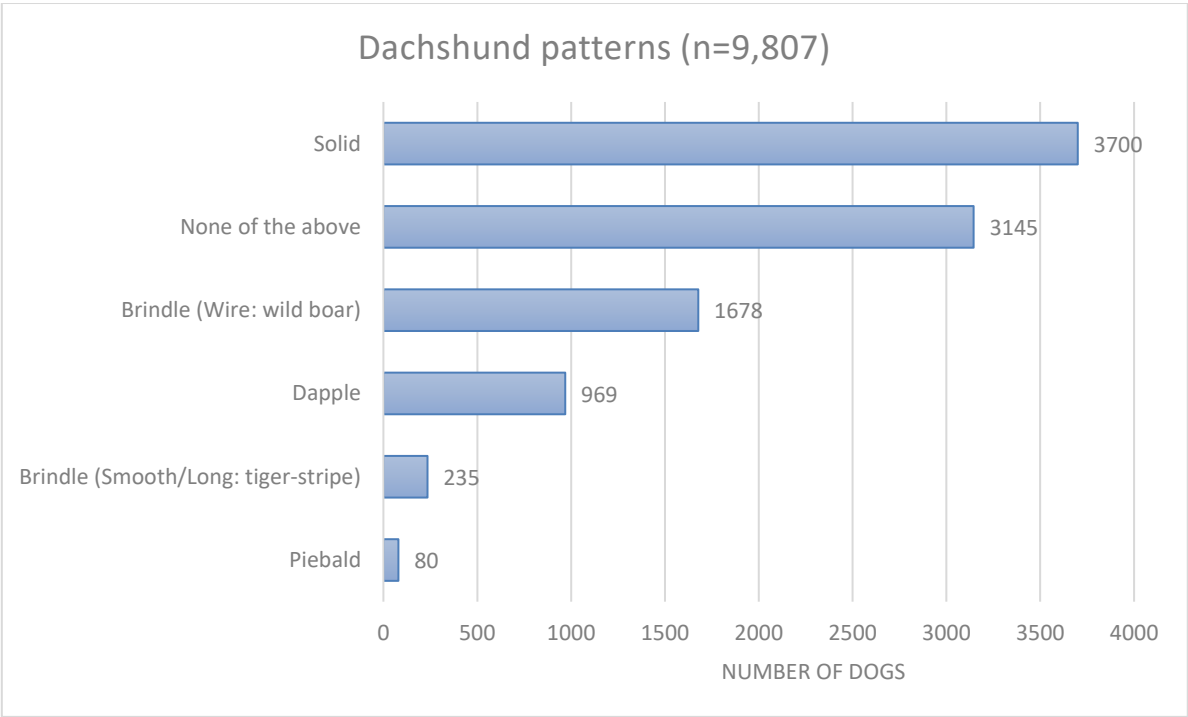

Figure 7: Coat pattern of Dachshunds included in the survey, as reported by their owners

Lifestyle

Owners were asked to select the types of food that they feed their Dachshund. The most frequently selected food type was grain-free kibble (26.0%, 3,602 of 13,836), followed by grain-inclusive kibble (17.0%) and then cooked meat (14.9%). A full breakdown of the selected food types are shown in Figure 8.

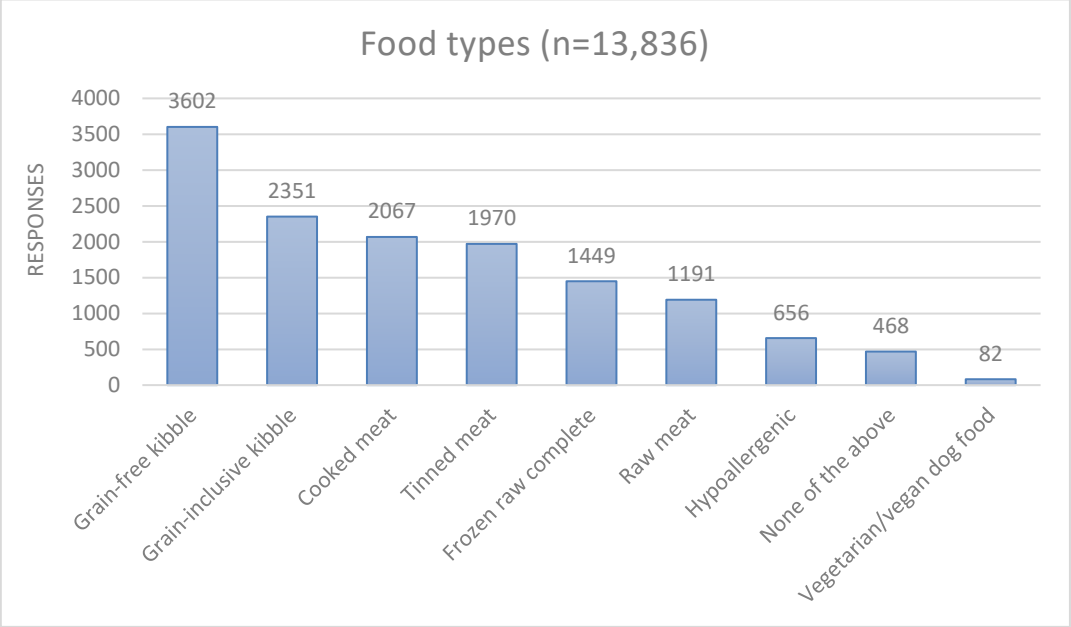

Figure 8: Types of food given to the Dachshunds included in the survey

Owners were asked to select the types of meat that they feed their Dachshund. The most frequently selected meat was chicken (22.4%, 6,759 of 30,133), followed by beef (15.9%) and then fish (13.7%). A full breakdown of the selected meat types are shown in Figure 9.

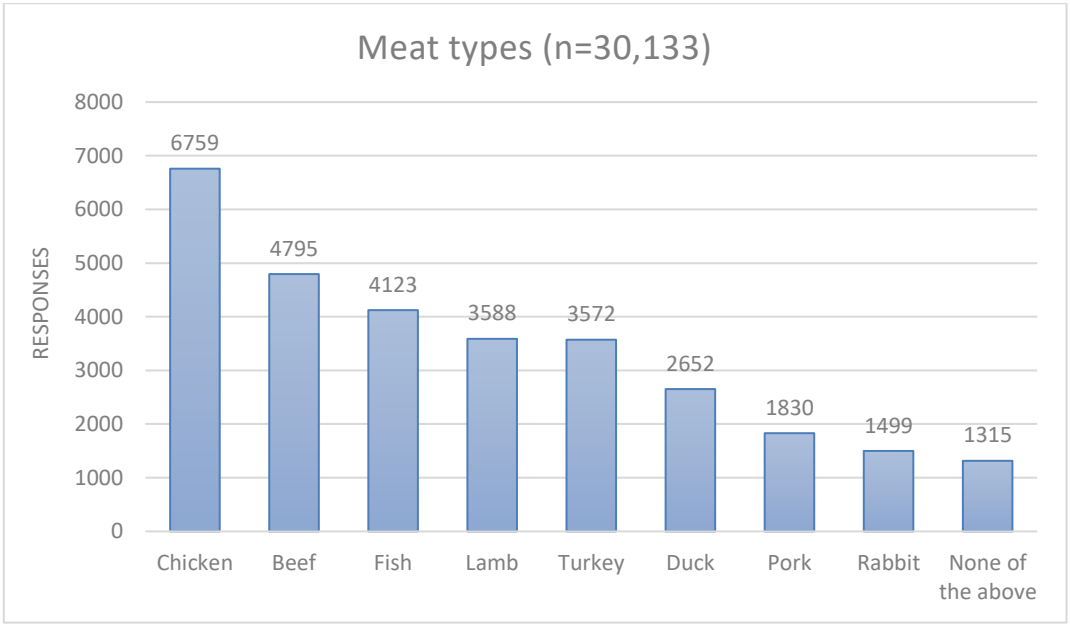

Figure 9: Types of meat given to the Dachshunds included in the survey

When asked if their dog had any known dietary allergies, out of 9,573 dogs, 820 (8.6%) did have known dietary allergies. Figure 10 shows the dietary allergies reported in the survey, the most frequently reported being 'other' (23.3%, 341 of 1,466), followed by 'chicken' (16.4%) and then 'wheat' (14.7%).

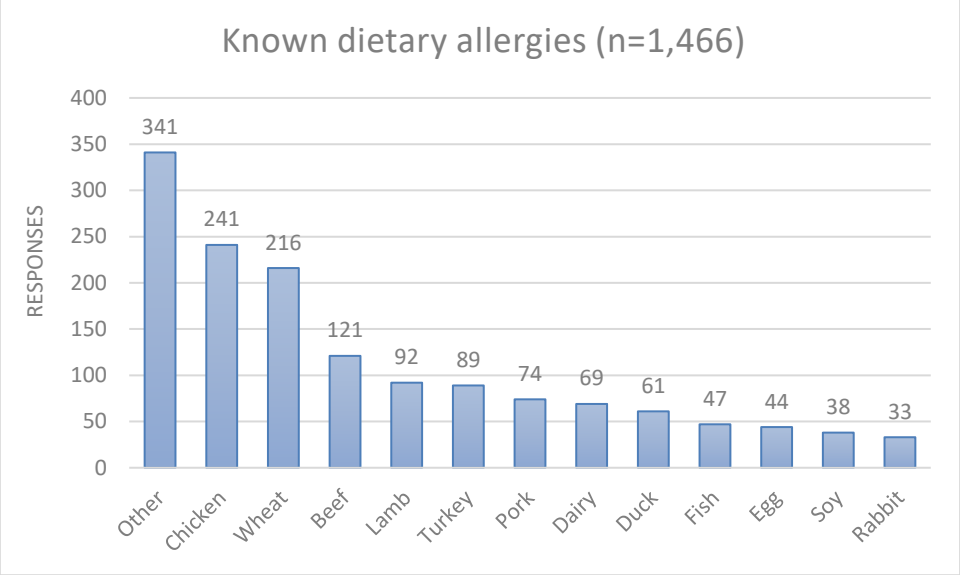

Figure 10: Known dietary allergies, as reported in the survey

The most common answers to "other" for known dietary allergies not already listed in the survey were: rice (n=22), grain (n=22), corn (n=13), potato (n=12), and peas (n=10).

Figure 11 shows where the Dachshunds included in the survey were housed during the day and during the night, as reported by their owners. The majority of Dachshunds were housed indoors during both the day (66.1%, 5,802 of 8,784) and the night (98.7%, 8,668 of 8,784).

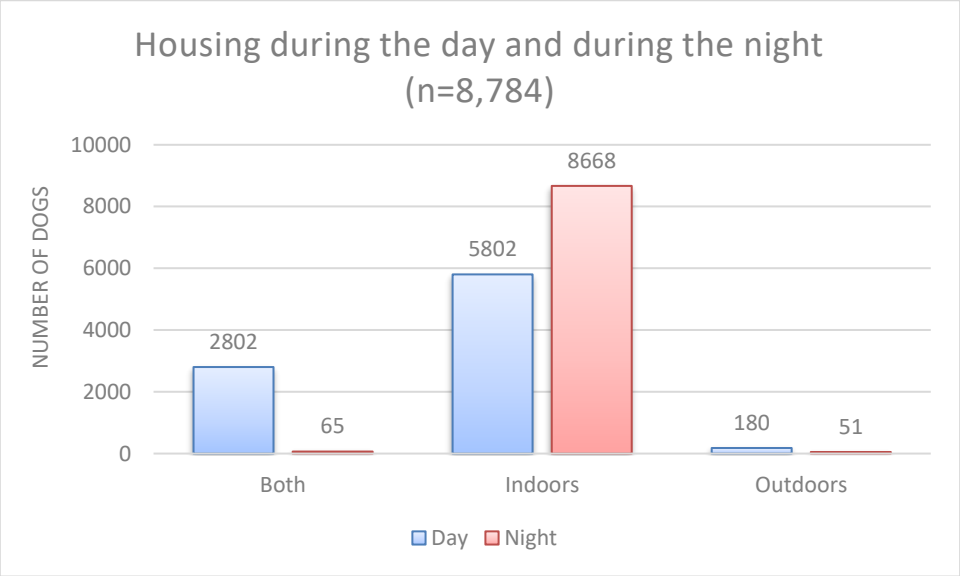

Figure 11: Housing during the day and during the night, as reported in the survey

Figure 12 shows what type of bedding material the Dachshunds included in the survey usually sleep on, as reported by their owners. The majority of Dachshunds sleep on synthetic fibre (64.9%, 5,704 of 8,784).

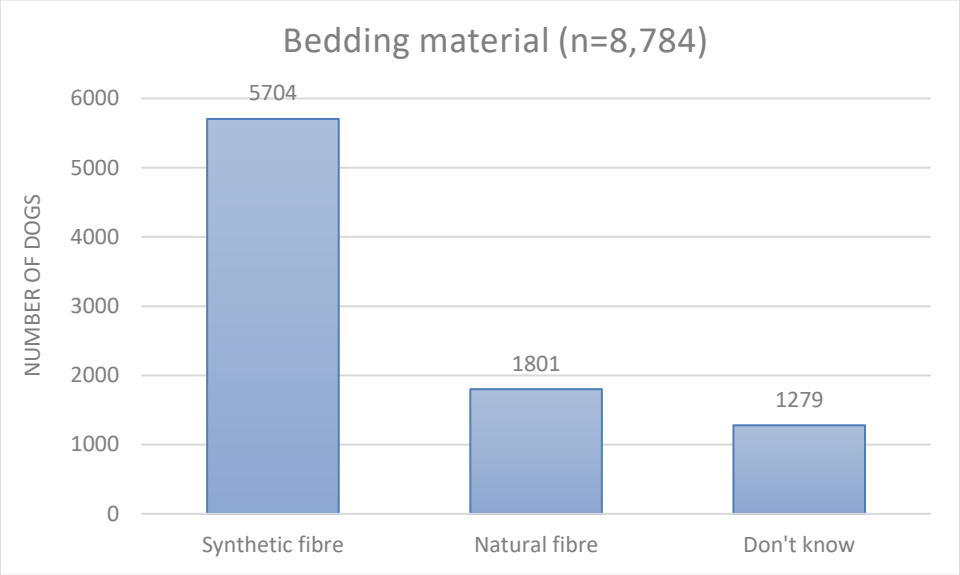

Figure 12: Usual bedding material, as reported in the survey

Figure 13 shows on average how often the Dachshunds included in the survey are bathed, as reported by their owners. The majority of Dachshunds are only bathed when needed (38.8%, 3,406 of 8,784).

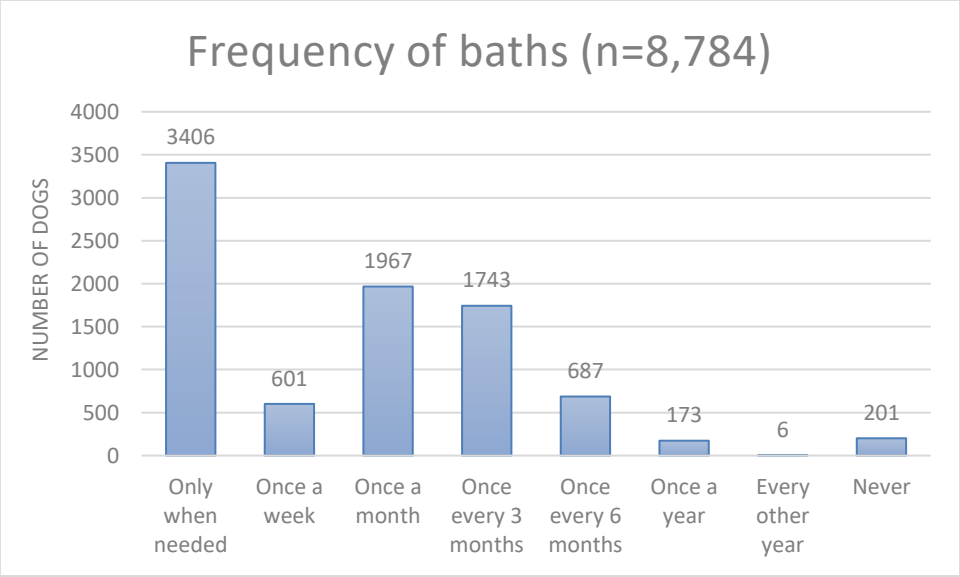

Figure 13: How often the Dachshunds included in the survey are bathed, as reported by their owners

When asked if their dog had any known environmental allergies, out of 9,398 dogs, 1,601 (17.0%) did have known environmental allergies. Figure 14 shows the environmental allergies reported in the survey, the most frequently reported being ‘grass’ (37.0%, 593 of 1,601), followed by ‘other’ (21.6%) and then ‘pollen’ (20.8%).

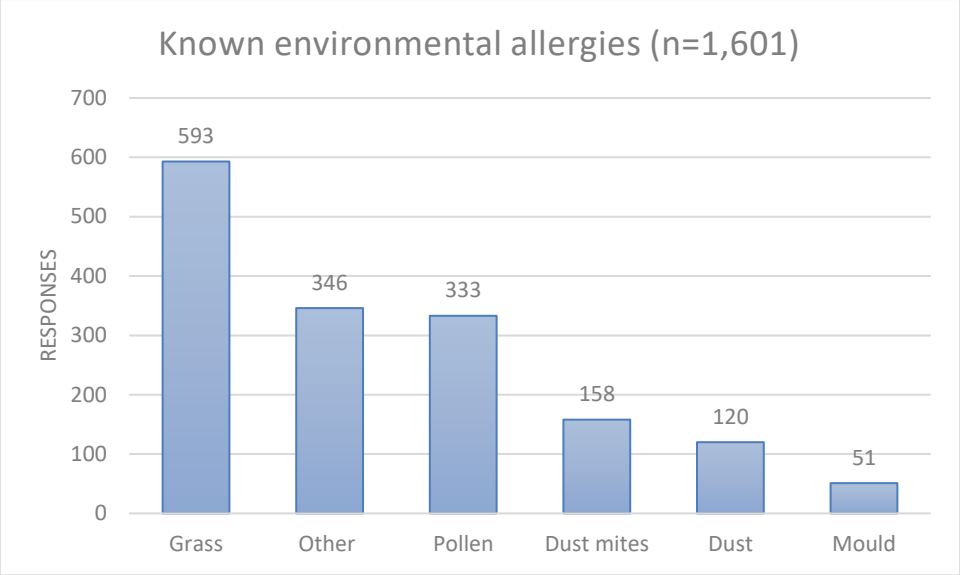

Figure 14: Known environmental allergies for the Dachshunds included in the survey, as reported by their owners

The most common answers to “other” for known environmental allergies not already listed in the survey were: mites (n=21), trees (n=13), nettles (n=9), and fleas (n=8).

Health

The survey investigated the number of dogs affected by the following skin conditions: 'autoimmune', 'colour dilution alopecia (CDA)', 'dermatitis, 'ear fissures', 'patterned baldness', 'skin allergies', and 'skin cancer'. The survey also investigated the number of dogs affected by 'intervertebral disc disease (IVDD)'. Within each of these categories, the respondents reported the age of onset, method of diagnosis and treatment given.

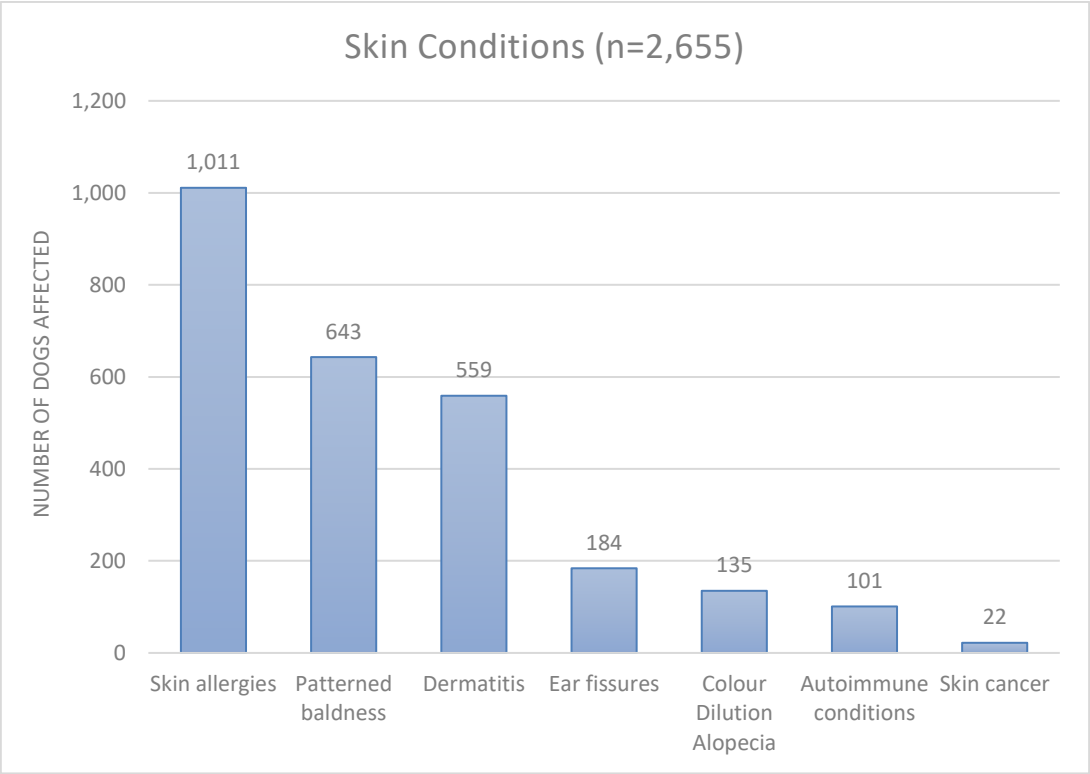

Figure 15: Overall summary of skin and/or coat conditions reported in the survey

The total number of skin and/or coat conditions reported in the survey was 2,655. Out of the 2,655 skin and/or coat conditions reported 38.1% were for skin allergies, 24.2% were for patterned baldness, and 21.1% were for dermatitis. The results for each skin and/or coat condition are given in Table 2.

Table 2: Overall summary of skin and/or coat conditions reported in the survey

Skin Condition	Number affected	Percentage
Skin allergies	1,011	38.1%
Patterned baldness	643	24.2%
Dermatitis	559	21.1%
Ear fissures	184	6.9%
Colour Dilution Alopecia	135	5.1%
Autoimmune conditions	101	3.8%
Skin cancer	22	0.8%
Total	**2,655**	

Out of 8,763 Dachshunds, 2,438 (27.8%) had been affected by at least one skin and/or coat condition at some point in his/her lifetime. Of these dogs, 1,389 (57.0%) were male and 1,049 (43.0%) were female. Figure 16 shows that 18.8% (834 of 4,442) of the entire dogs had been affected by a skin and/or coat condition(s), and 37.1% (1,594 of 4,294) of the neutered dogs had been affected by a skin and/or coat condition(s). Statistical analysis confirmed that neutered dogs are significantly more likely to be affected by skin and/or coat conditions in general ($p < 0.001$, OR 2.55 (95% CI 2.32 – 2.82)).

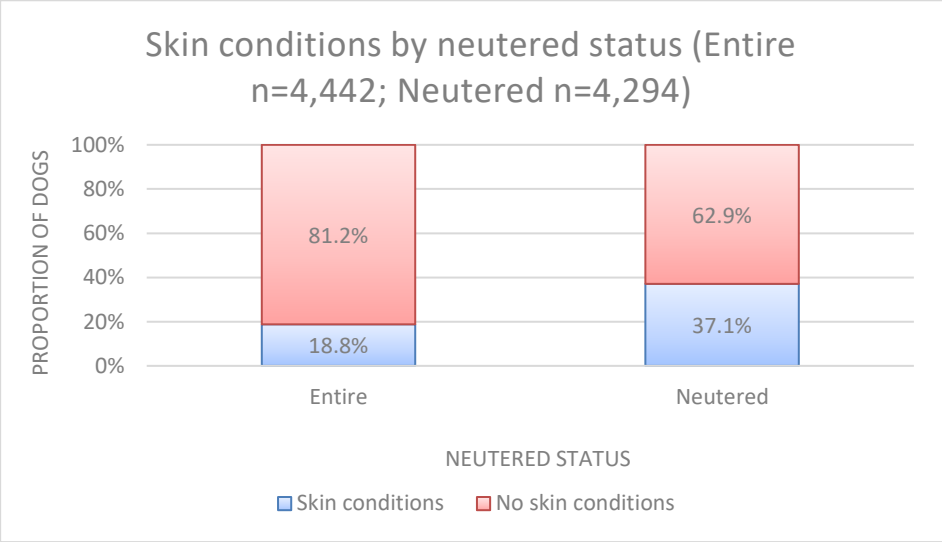

Figure 16: Proportion of neutered and entire dogs affected by a skin condition, as reported in the survey

Table 3 shows the neutered status of the dogs affected by each specific skin and/or coat condition. For all conditions reported in the survey the majority of dogs were neutered, suggesting an association between neutering and the development of particular skin conditions.

Skin condition	Entire	Neutered	Don't know	Total
Autoimmune condition	26 (25.7%)	75 (74.3%)	0	**101**
Colour Dilution Alopecia	29 (21.5%)	105 (77.8%)	1	**135**
Dermatitis	146 (26.1%)	409 (73.2%)	4	**559**
Ear fissures	58 (31.5%)	125 (67.9%)	1	**184**
Patterned baldness	191 (29.7%)	448 (69.7%)	4	**643**
Skin allergies	295 (29.2%)	712 (70.4%)	4	**1011**
Skin cancer	2 (9.1%)	20 (90.9%)	0	**22**
Other	0 (0.0%)	3 (100.0%)	0	**3**

Table 3: Specific skin conditions by neutered status, as reported in the survey

Table 4 shows the total number and percentage of dogs per colour affected by skin and/or coat conditions in descending order. The results from this survey suggest that blue Dachshunds have a higher risk of developing a skin condition compared with any other colour, with 55.4% of blue Dachshunds in this survey being affected by one or more skin condition (36 of 65 blue Dachshunds included in this question). The results from this survey

show that dilutes are significantly more likely to be affected by skin and/or coat conditions in general ($p < 0.01$, OR 1.78 (95% CI 1.24-2.57)).

Table 4: Percentage of Dachshunds affected by a skin and/or coat condition per colour, as reported in the survey

Colour	General skin and/or coat conditions		
	N affected	Total	%
Blue (dilute, including Blue & Tan)	36	65	55.4%
Black	10	21	47.6%
Chocolate & Tan	370	1081	34.2%
Chocolate & Cream	14	43	32.6%
Black & Tan	928	2973	31.2%
Red (or shaded red)	462	1773	26.1%
Isabella (dilute, including Isabella & Tan)	11	43	25.6%
None of the above	20	83	24.1%
Brindle (Smooth and Long)	32	137	23.4%
Silver Dapple (Black & Tan Dapple)	112	485	23.1%
Cream (or shaded cream)	52	229	22.7%
Brindle (Wires)	278	1244	22.3%
Chocolate Dapple	64	303	21.1%
Black & Cream	24	121	19.8%
Red Dapple	16	92	17.4%
Double dapple (any colour variant)	5	30	16.7%
Blue Dapple	2	13	15.4%
Cream Dapple	2	27	7.4%

Table 5 shows the percentage of dogs per colour affected by specific skin and/or coat conditions. The survey found that dilutes are significantly more likely to be affected by autoimmune conditions, colour dilution alopecia and patterned baldness but not more likely to be affected by dermatitis, ear fissures, skin allergies or skin cancer.

Table 5: Percentage of Dachshunds affected by specific skin conditions per colour, as reported in the survey

Colour	Autoimmune			CDA			Dermatitis			Ear fissures		
	N affected	Total	%	N affected	Total	%	N affected	Total	%	N affected	Total	%
Black	0	6	0.0%	1	9	11.1%	5	8	62.5%	0	10	0.0%
Black & Cream	0	19	0.0%	2	21	9.5%	4	20	20.0%	2	23	8.7%
Black & Tan	33	686	4.8%	42	776	5.4%	218	732	29.8%	70	838	8.4%
Blue (dilute, including Blue & Tan)	3	21	14.3%	23	28	82.1%	5	23	21.7%	4	30	13.3%
Blue Dapple	0	1	0.0%	1	2	50.0%	1	2	50.0%	1	2	50.0%
Brindle (Smooth and Long)	1	25	4.0%	1	28	3.6%	4	21	19.0%	4	30	13.3%
Brindle (Wires)	18	204	8.8%	12	243	4.9%	65	224	29.0%	11	258	4.3%
Chocolate & Cream	0	10	0.0%	2	12	16.7%	2	9	22.2%	1	14	7.1%
Chocolate & Tan	15	294	5.1%	26	300	8.7%	60	290	20.7%	44	345	12.8%
Chocolate Dapple	4	50	8.0%	2	56	3.6%	9	50	18.0%	8	56	14.3%
Cream (or shaded cream)	4	36	11.1%	3	46	6.5%	15	39	38.5%	2	48	4.2%
Cream Dapple	2	2	100.0%	0	2	0.0%	1	2	50.0%	0	2	0.0%
Double dapple (any colour variant)	0	3	0.0%	0	5	0.0%	3	5	60.0%	1	5	20.0%
Isabella (dilute, including Isabella & Tan)	2	6	33.3%	6	7	85.7%	1	5	20.0%	1	8	12.5%
None of the above	0	11	0.0%	0	15	0.0%	6	13	46.2%	2	18	11.1%
Red (or shaded red)	14	321	4.4%	11	382	2.9%	122	365	33.4%	25	424	5.9%
Red Dapple	0	11	0.0%	0	14	0.0%	6	16	37.5%	2	13	15.4%
Silver Dapple (Black & Tan Dapple)	5	92	5.4%	3	89	3.4%	32	82	39.0%	6	98	6.1%

Colour	Patterned baldness			Skin allergies			Skin cancer			Other		
	N affected	Total	%	N affected	Total	%	N affected	Total	%	N affected	Total	%
Black	2	8	25.0%	3	5	60.0%	0	9	0.0%	0	0	0.0%
Black & Cream	5	22	22.7%	16	20	80.0%	1	24	4.2%	0	1	0.0%
Black & Tan	273	826	33.1%	370	728	50.8%	11	835	1.3%	3	11	27.3%
Blue (dilute, including Blue & Tan)	16	28	57.1%	7	23	30.4%	0	29	0.0%	0	0	0.0%
Blue Dapple	1	2	50.0%	1	2	50.0%	0	2	0.0%	0	0	0.0%
Brindle (Smooth and Long)	8	29	27.6%	11	26	42.3%	0	29	0.0%	0	0	0.0%
Brindle (Wires)	48	253	19.0%	119	234	50.9%	2	253	0.8%	0	2	0.0%
Chocolate & Cream	4	14	28.6%	4	10	40.0%	0	12	0.0%	0	0	0.0%
Chocolate & Tan	127	331	38.4%	133	294	45.2%	1	343	0.3%	0	1	0.0%
Chocolate Dapple	16	57	28.1%	22	46	47.8%	0	57	0.0%	0	0	0.0%
Cream (or shaded cream)	6	48	12.5%	31	41	75.6%	1	48	2.1%	0	1	0.0%
Cream Dapple	0	2	0.0%	1	2	50.0%	0	2	0.0%	0	0	0.0%
Double dapple (any colour variant)	1	5	20.0%	3	5	60.0%	0	5	0.0%	0	0	0.0%
Isabella (dilute, including Isabella & Tan)	6	8	75.0%	3	5	60.0%	0	7	0.0%	0	0	0.0%
None of the above	5	17	29.4%	8	14	57.1%	0	16	0.0%	0	0	0.0%
Red (or shaded red)	99	418	23.7%	231	360	64.2%	5	401	1.2%	0	5	0.0%
Red Dapple	4	16	25.0%	6	12	50.0%	0	15	0.0%	0	0	0.0%
Silver Dapple (Black & Tan Dapple)	22	97	22.7%	42	86	48.8%	1	95	1.1%	0	0	0.0%

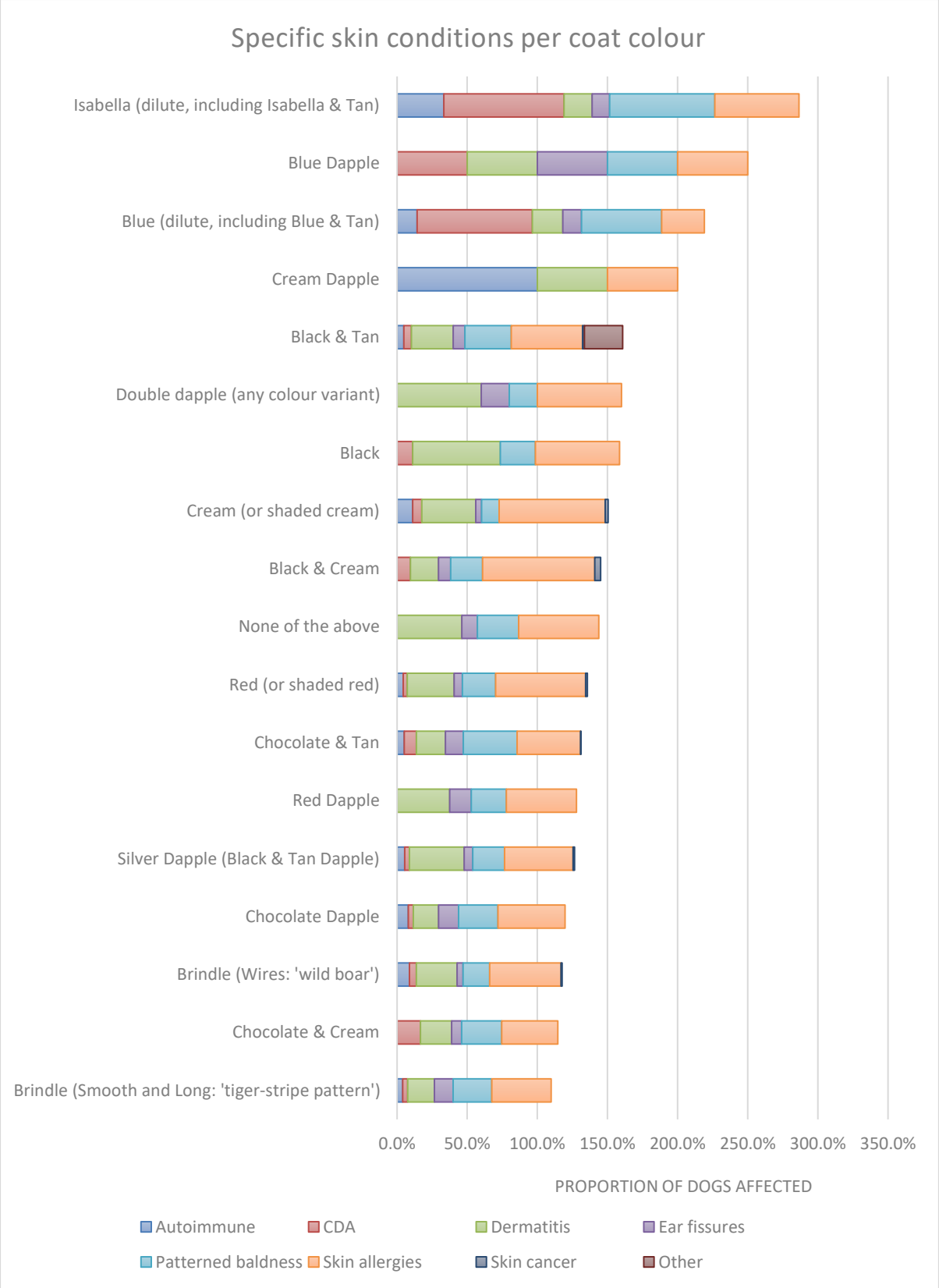

Figure 17: Percentage of Dachshunds affected by specific skin conditions per colour, as reported in the survey

Figure 18 shows the descriptions that most closely describe the affected dogs' coats, as reported by their owners. The most frequently reported coat description was 'normal' (49.6%, 1,448 of 2,921), followed by 'dry' (18.8%) and then 'thin' (18.6%).

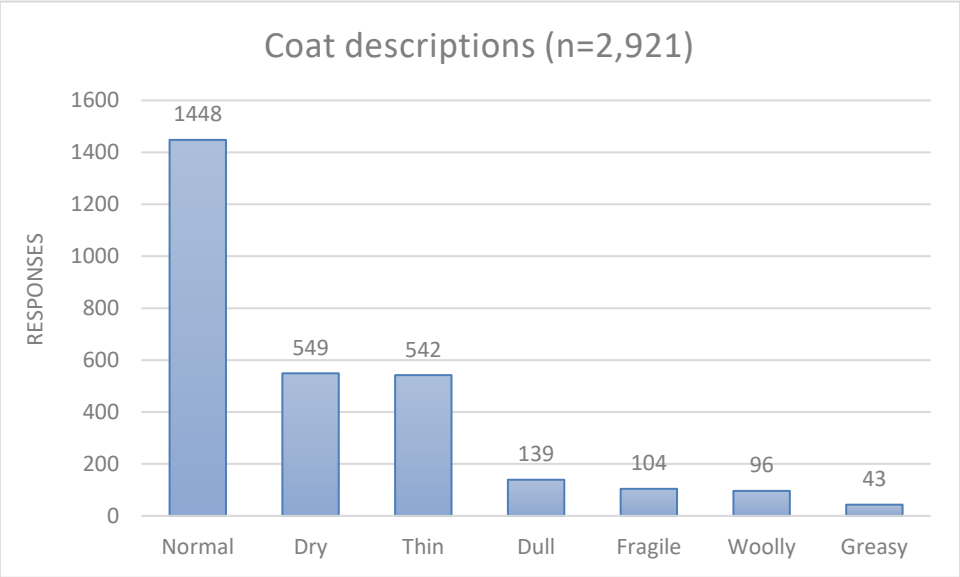

Figure 18: Coat descriptions, as reported by their owners

Figure 19 shows the clinical signs seen in the affected dogs, as reported by their owners. The most frequently reported clinical sign was 'itching' (17.6%, 978 of 5,543), followed by 'hair loss' (16.9%) and then 'dry skin' (11.7%).

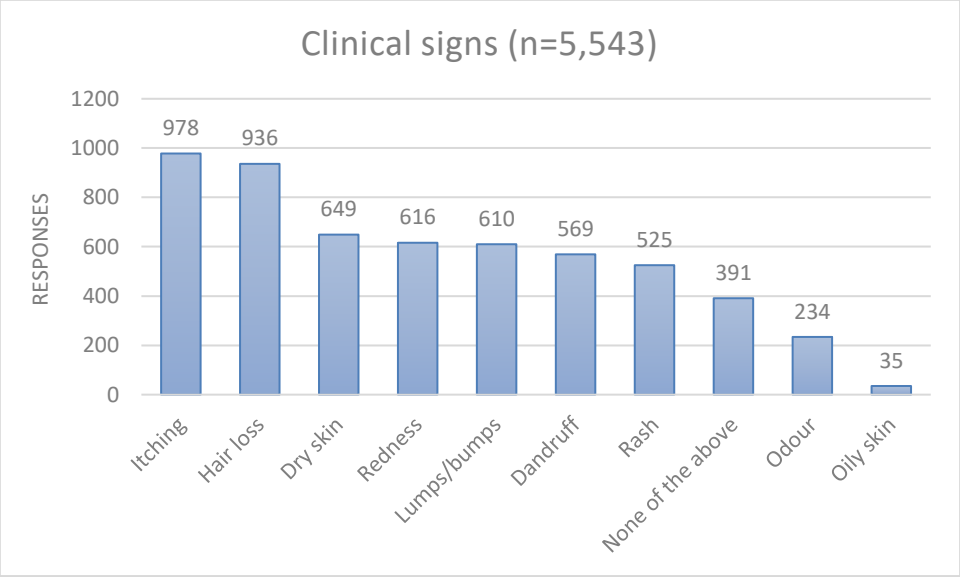

Figure 19: Clinical signs, as reported by their owners

When asked if their Dachshund scratches, rubs, chews, licks or bites himself/herself, out of 2,433 responses, 1,407 (57.8%) answered 'Yes – Intermittent', 189 (7.8%) answered 'Yes – Continuous', and 837 (34.4%) answer 'No'.

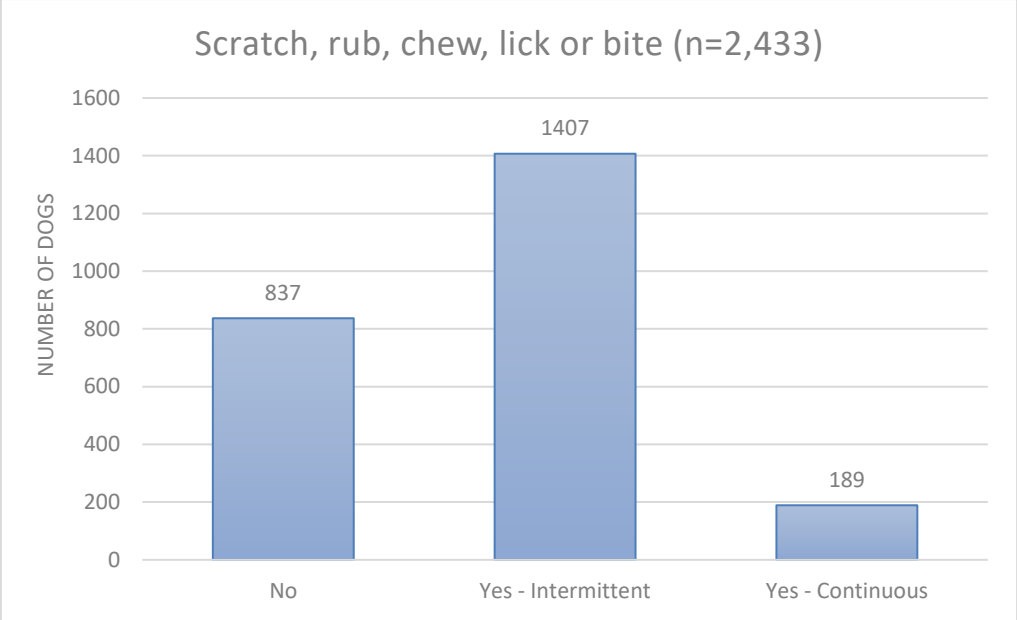

Figure 20: Frequency of abnormal irritable behaviours, as reported in the survey

Figure 21 shows where on the body the problem started and where it spread to. The majority of owners selected 'chest' for where on the body the problem started (21.5%, 822 of 3,820) and selected 'none of the above' for where on the body did the problem spread (38.3%, 1,334 of 3,479), suggesting that the problem often did not spread beyond the initial site.

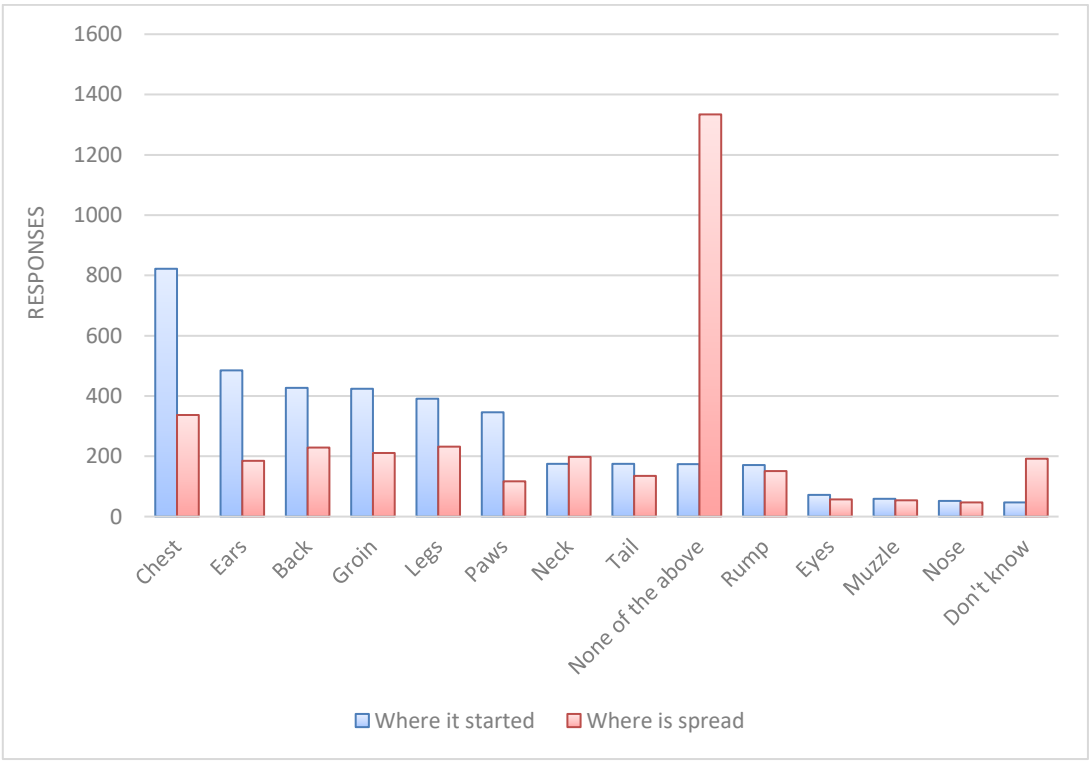

Figure 21: Where on the body the skin problem started and where it spread to, as reported in the survey

Skin Allergies

When asked if their Dachshund has ever suffered from skin allergies, out of 2,279 responses, 1,011 (44.4%) answered “Yes”, 902 (39.6%) answered “No” and 366 (16.1%) answered ‘Don’t know’. The overall prevalence for skin allergies (10.2%, 1,011 of 9,908) reported in this survey is greater than the overall prevalence reported in the DachsLife 2018 health survey (8.2%).

The results show that neutered dogs are significantly more likely to be affected by a skin allergy ($p < 0.001$, OR 1.55 (95% CI 1.28 – 1.88)).

The median age of the affected dogs when they first experienced clinical signs associated with skin allergies was 2 years old (min: less than 1 year old, max: 12 years old). Figure 22 shows a decrease in trend for cases of skin allergies as the age in years increases.

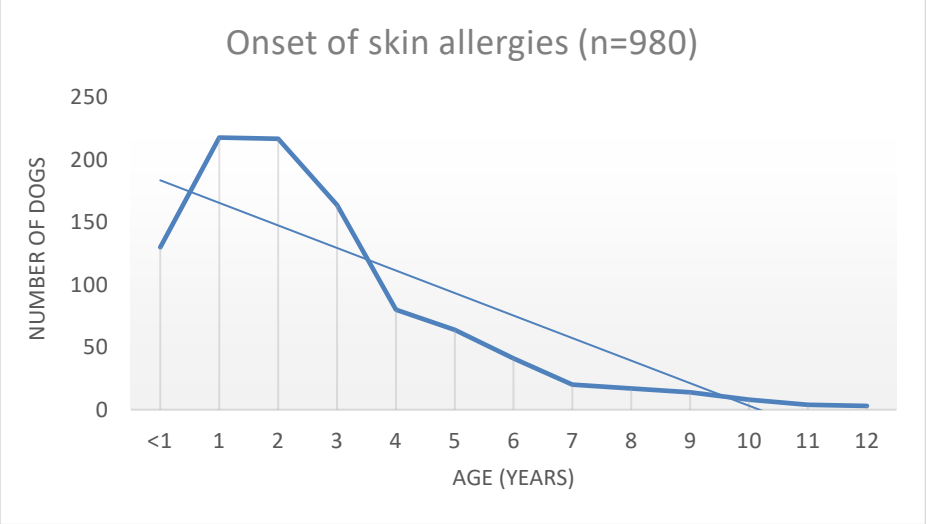

Figure 22: Onset of skin allergies, as reported in the survey

Figure 23 shows how often these dogs are affected by the condition, with the majority of owners reporting that their Dachshund is occasionally (e.g. yearly) affected by it (41.2%, 411 of 997).

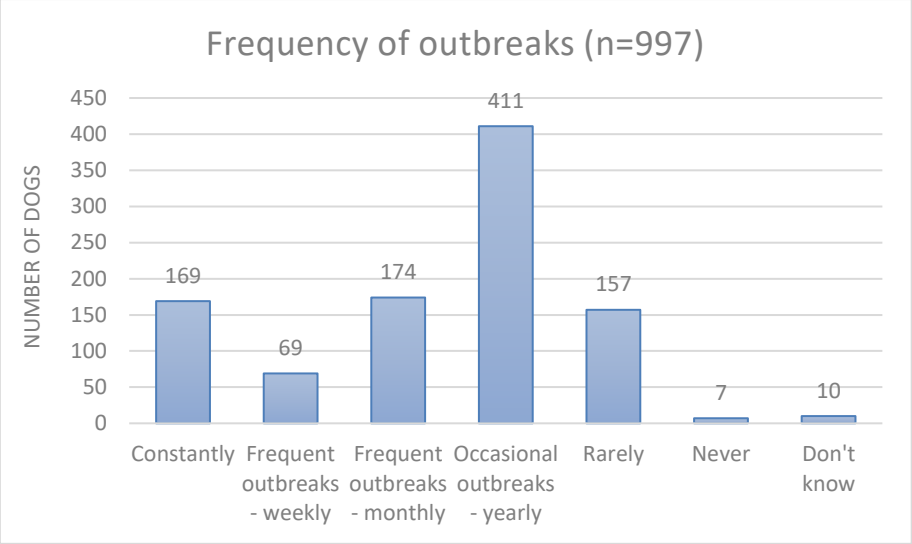

Figure 23: Frequency of skin allergy outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 997 responses, 644 (64.6%) answered “Yes”, 233 (23.4%) answered “No” and 120 (12.0%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s skin allergies were worse in the summer (45.5%, 507 of 1,115). A full breakdown of results are shown in Figure 24.

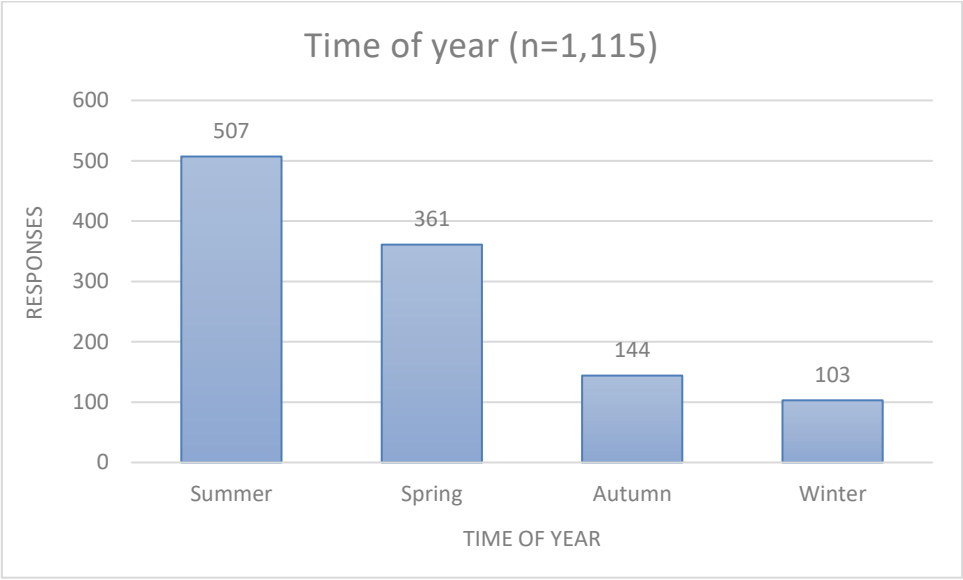

Figure 24: Time of year the problems associated with skin allergies worsened, as reported in the survey

The median age of the affected dogs when the suspected condition was confirmed by veterinary diagnosis was 2 years old (min: less than 1 year old, max: 14 years old). Figure 25 shows the method of diagnosis, the most frequently reported being visual diagnosis by veterinary surgeon (52.6%, 637 of 1,210).

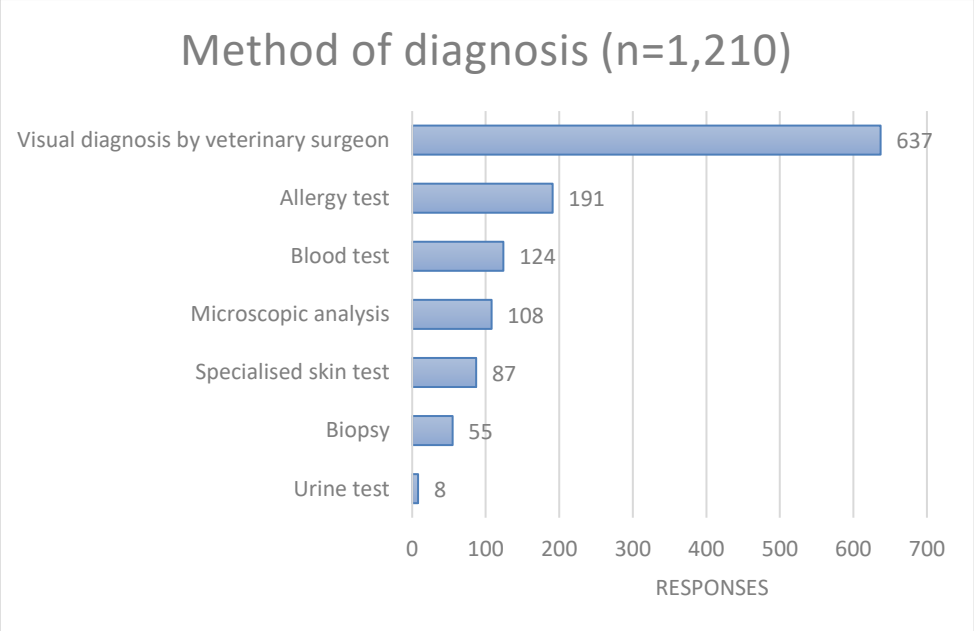

Figure 25: Method of diagnosis for skin allergies, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported treatment was prescriptive medication – temporary (33.9%, 411 of 1,213). A full breakdown of results are shown in Figure 26.

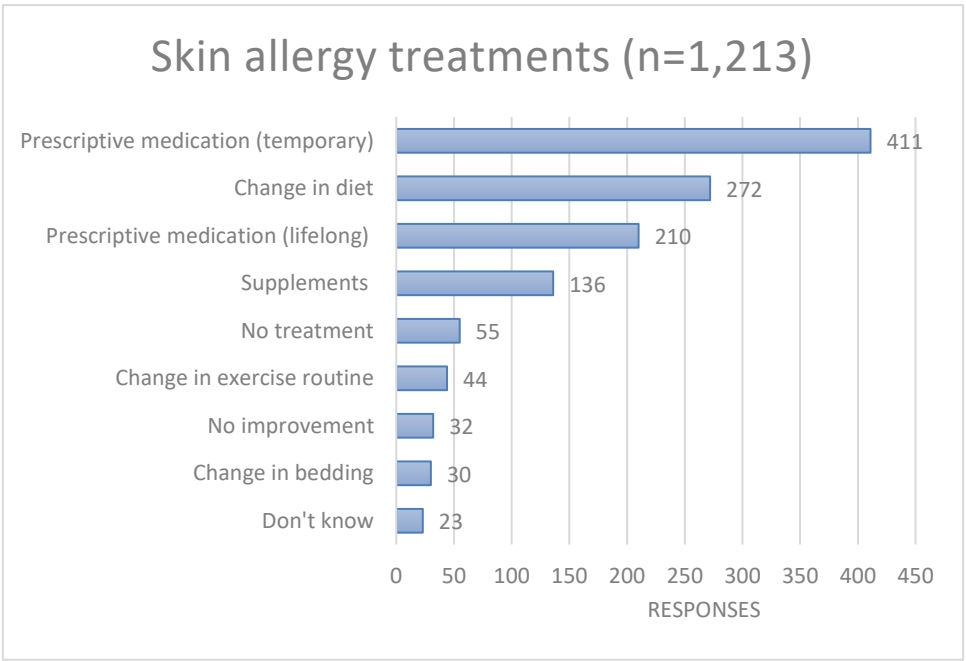

Figure 26: Treatments for skin allergies, as reported in the survey

The top prescriptive medications reported in the survey were: apoquel (n=92), shampoo/ malaseb (n=71), antihistamine/ piriton (n=55), topical cream (unspecified) (n=42), and steroid (unspecified) (n=30).

Patterned Baldness

When asked if their Dachshund has ever suffered from patterned baldness, out of 2,312 responses, 643 (27.8%) answered “Yes”, 1,538 (66.5%) answered “No” and 131 (5.7%) answered ‘Don’t know’.

Figure 27 shows the percentage of Dachshunds affected by patterned baldness per colour. The results show that dilute colours are significantly more likely to be affected by patterned baldness compared to the other coat colours with 75.0% (6 of 8) of isabella Dachshunds affected, 57.1% (16 of 28) of blue Dachshunds affected and 50.0% (1 of 2) of blue dapple Dachshunds affected ($p < 0.001$, OR 3.77 (95% CI 1.95-7.27)).

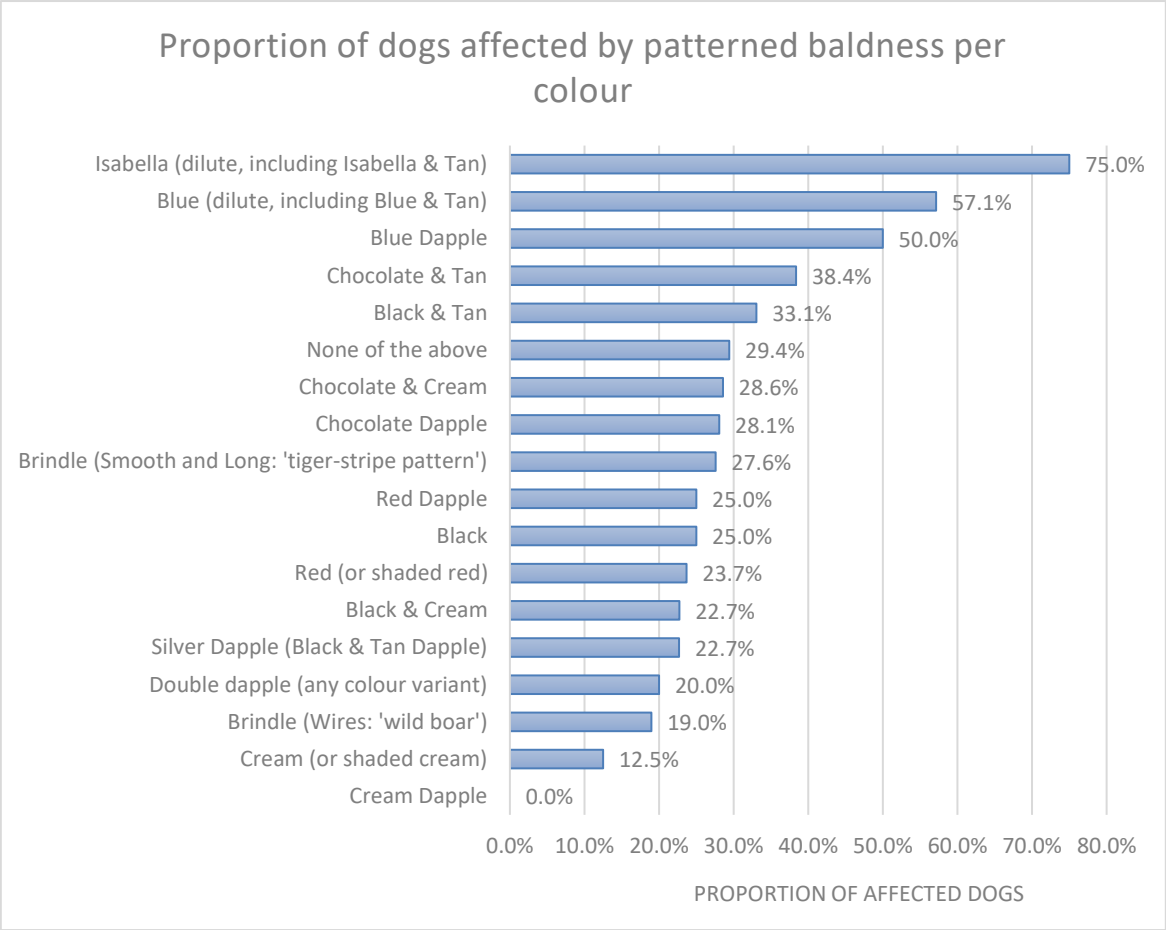

Figure 27: Proportion of dogs affected by patterned baldness per colour, as reported in the survey

The median age of the affected dogs when they first experienced clinical signs associated with patterned baldness was 2 years old (min: less than 1 year old, max: 14 years old). Figure 28 shows a decrease in trend for cases of patterned baldness as the age in years increases.

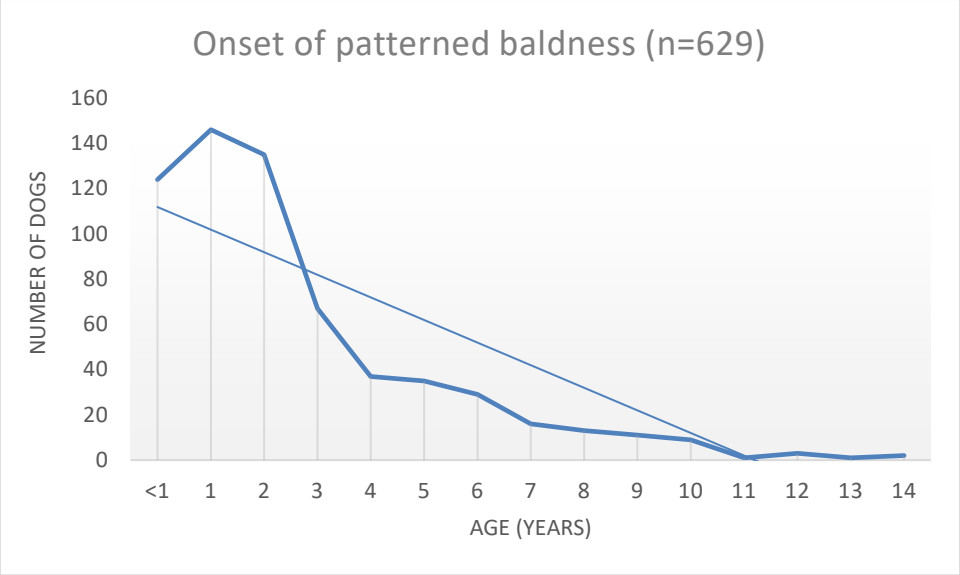

Figure 28: Onset of patterned baldness, as reported in the survey

Figure 29 shows how often these dogs are affected by the condition, with the majority of owners reporting that their Dachshund is occasionally (e.g. yearly) affected by it (37.9%, 245 of 647).

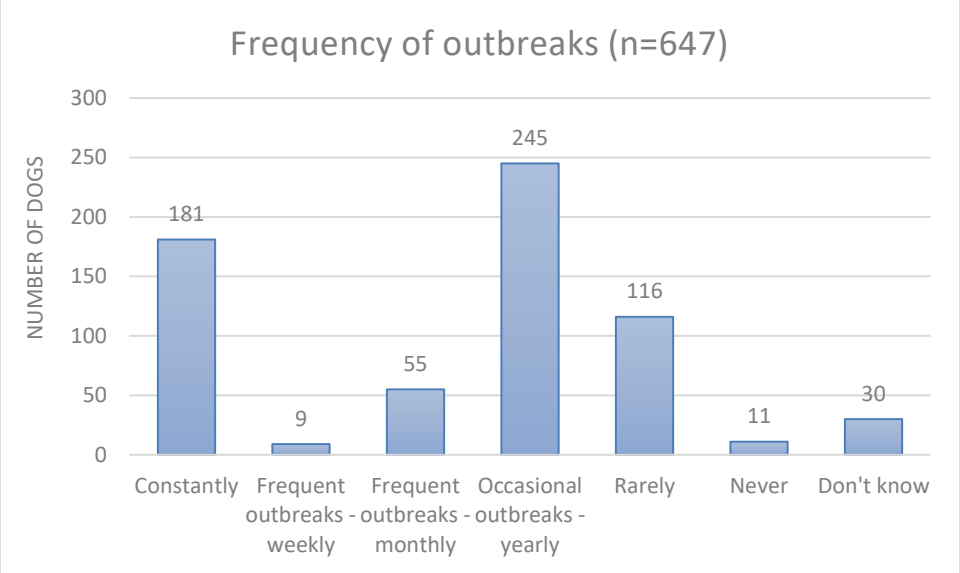

Figure 29: Frequency of patterned baldness outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 647 responses, 317 (49.0%) answered “Yes”, 209 (32.3%) answered “No” and 121 (18.7%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s patterned baldness was worse in the winter (36.8%, 175 of 475). A full breakdown of results are shown in Figure 30.

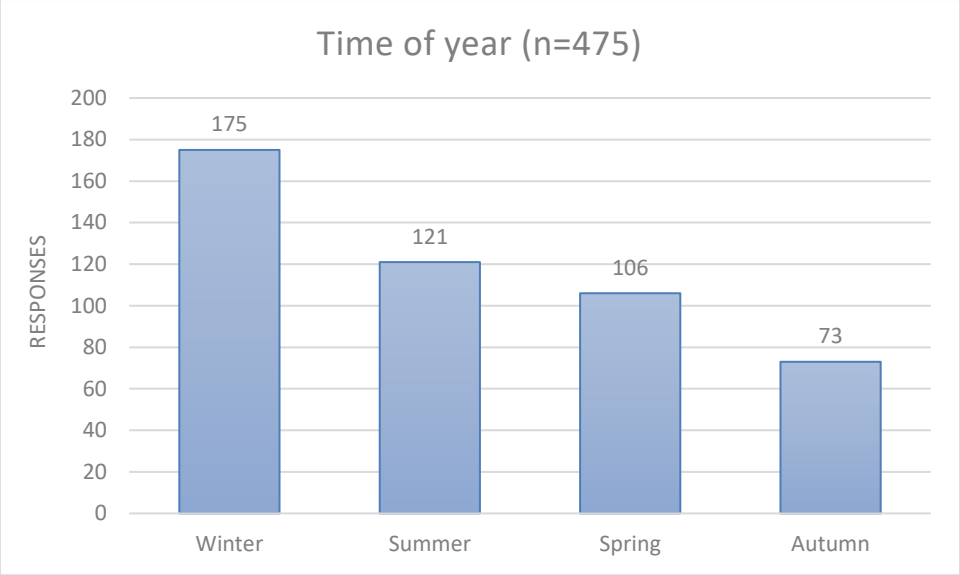

Figure 30: Time of year the problems associated with patterned baldness worsened, as reported in the survey

When asked which part of the body is affected by patterned baldness, the majority of owners reported patterned baldness around the chest area (23.6%, 331 of 1,400), followed by the ears (16.6%) and then the back (11.6%). A full breakdown of results are shown in Figure 31.

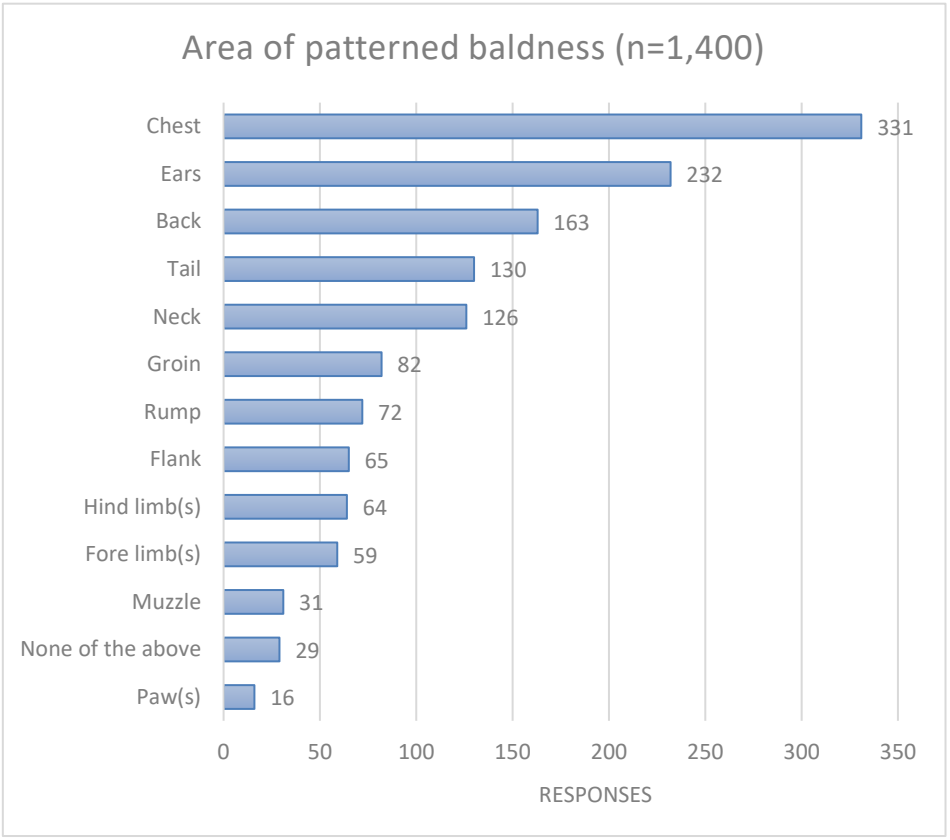

Figure 31: Parts of the body affected by patterned baldness, as reported in the survey

When asked if the skin colour of the bald areas was darker than the surrounding skin, out of 632 responses, 141 (22.3%) answered “Yes”, 458 (72.5%) answered “No” and 33 (5.2%) answered ‘Don’t know’.

When asked if they have seen spontaneous hair loss at a particular time of year, out of 629 responses, 234 (37.2%) answered “Yes”, 289 (45.9%) answered “No” and 106 (16.9%) answered ‘Don’t know’. However, when asked if they have seen spontaneous hair regrowth at a particular time of year, out of 629 responses, 197 (31.3%) answered “Yes”, 306 (48.6%) answered “No” and 126 (20.0%) answered ‘Don’t know’.

Figure 32 shows what time of year the owners noticed hair loss and hair regrowth. The majority of owners reported spontaneous hair loss in the winter (40.7%, 137 of 337) and spontaneous hair regrowth in the spring (36.2%, 96 of 265).

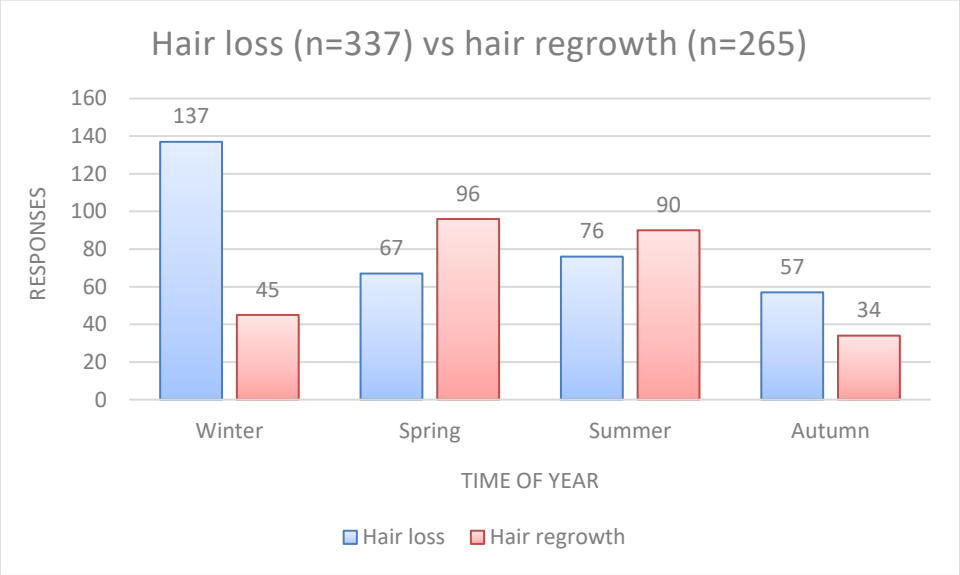

Figure 32: Time of year owners noticed hair loss and hair regrowth, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported answer was no treatment (23.0%, 169 of 734). This suggests that either there was no treatment that improved the severity of the condition or the condition improved without the need for treatment. A full breakdown of results are shown in Figure 33.

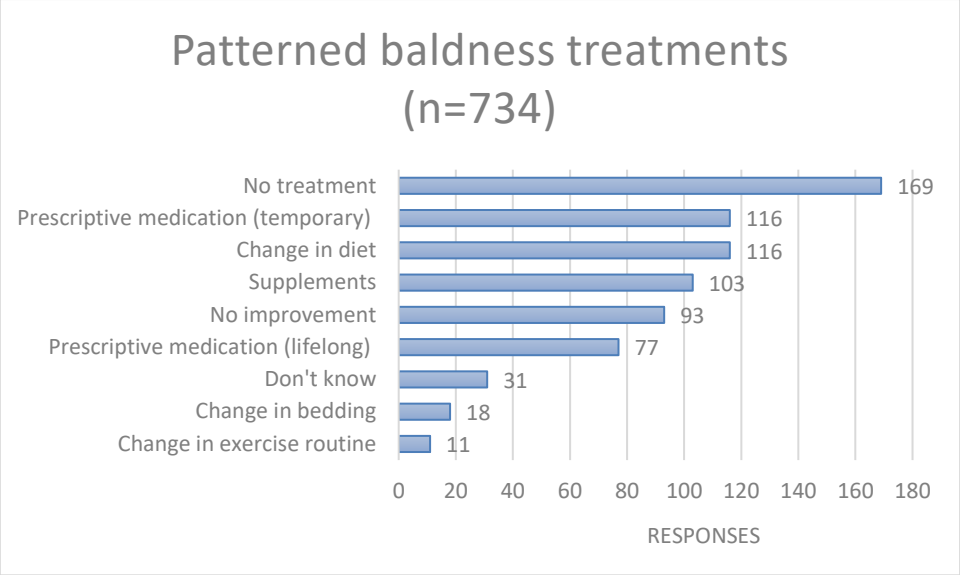

Figure 33: Treatments for patterned baldness, as reported in the survey

The top prescriptive medications reported in the survey were: shampoo/ malaseb (n=46), apoquel (n=21), coconut oil (n=12), topical cream (unspecified) (n=11), antihistamine/ piriton (n=10), and steroid (unspecified) (n=10).

Dermatitis

When asked if their Dachshund has ever suffered from dermatitis, out of 2,345 responses, 559 (23.8%) answered “Yes”, 1,347 (57.4%) answered “No” and 439 (18.7%) answered ‘Don’t know’.

The median age of the affected dogs when they first experienced clinical signs associated with dermatitis was 2 years old (min: less than 1 year old, max: over 16 years old). Figure 34 shows a decrease in trend for cases of dermatitis as the age in years increases.

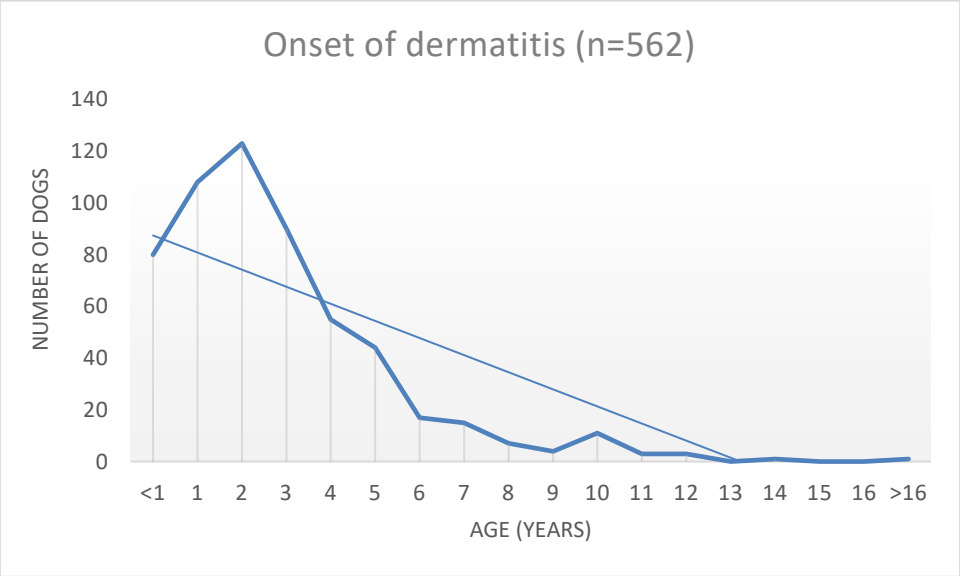

Figure 34: Onset of dermatitis, as reported in the survey

Figure 35 shows how often these dogs are affected by the condition, with the majority of owners reporting that their Dachshund is occasionally (e.g. yearly) affected by it (35.7%, 204 of 572).

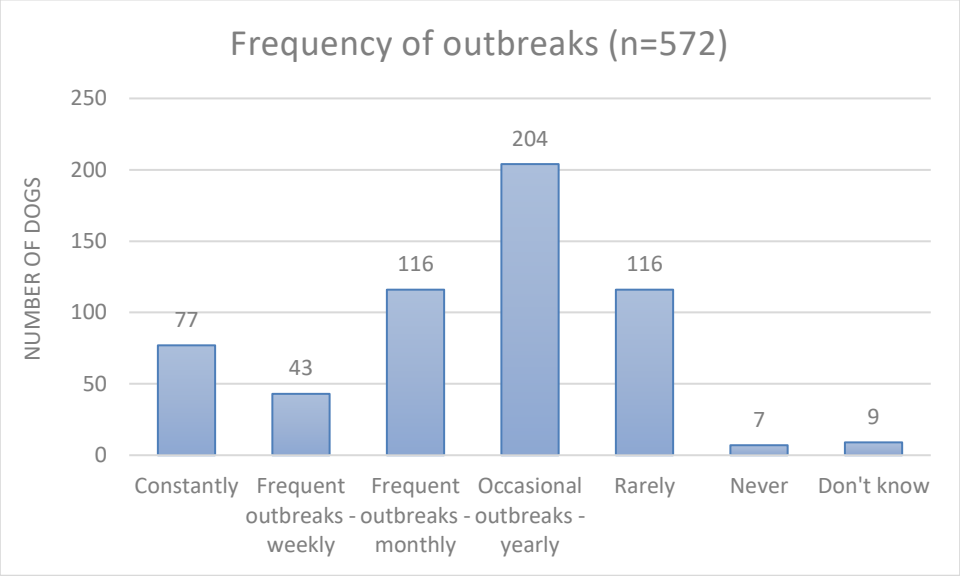

Figure 35: Frequency of dermatitis outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 574 responses, 352 (61.3%) answered “Yes”, 141 (24.6%) answered “No” and 81 (14.1%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s dermatitis was worse in the summer (41.8%, 251 of 600). A full breakdown of results are shown in Figure 36.

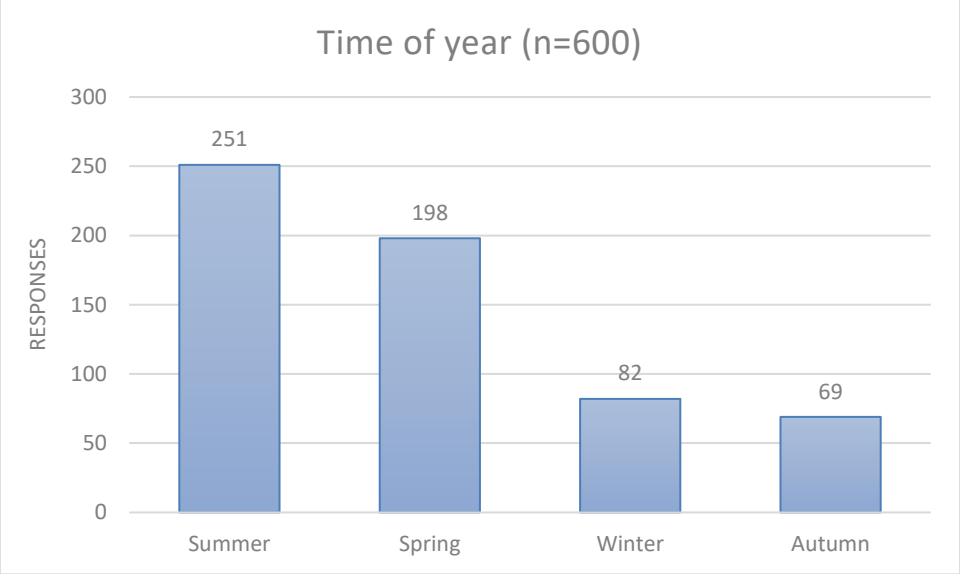

Figure 36: Time of year the problems associated with dermatitis worsened, as reported in the survey

The median age of the affected dogs when the suspected condition was confirmed by veterinary diagnosis was 2 years old (min: less than 1 year old, max: over 16 years old). Figure 37 shows the method of diagnosis, the most frequently reported being visual diagnosis by veterinary surgeon (49.7%, 366 of 736).

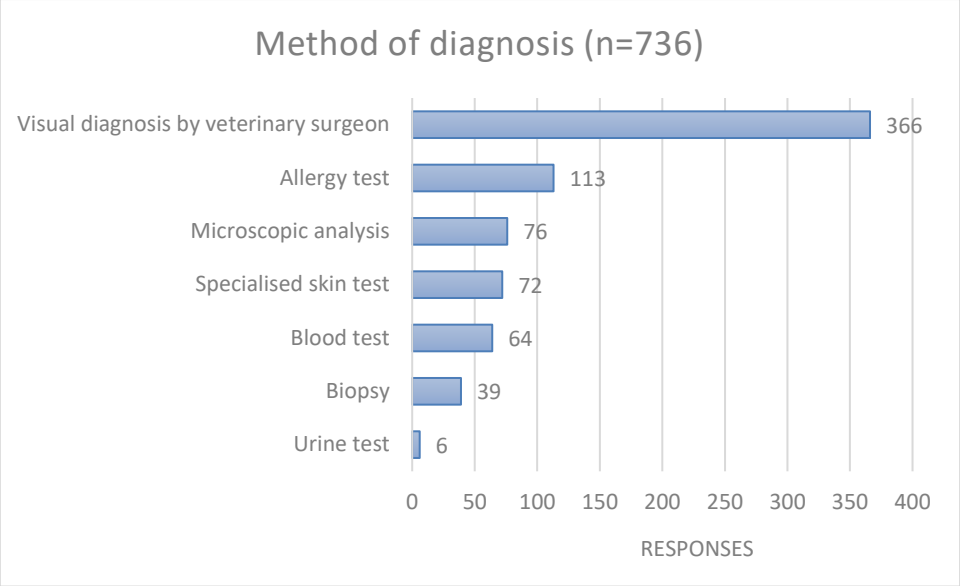

Figure 37: Method of diagnosis for dermatitis, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported treatment was prescriptive medication – temporary (32.8%, 238 of 726). A full breakdown of results are shown in Figure 38.

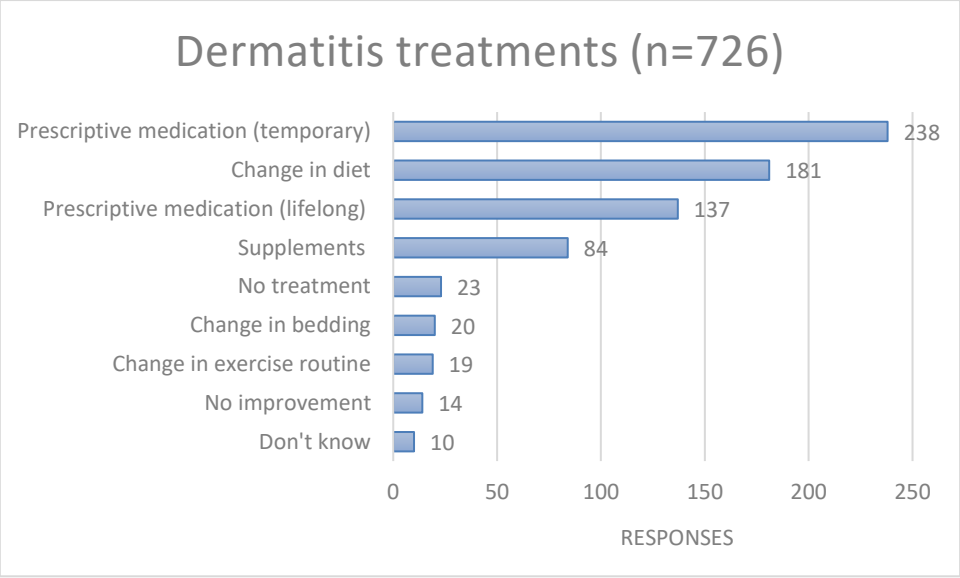

Figure 38: Treatments for dermatitis, as reported in the survey

The top prescriptive medications reported in the survey were: shampoo/ malaseb (n=65), apoquel (n=52), topical cream (unspecified) (n=30), antihistamine/ piriton (n=23), and steroid (unspecified) (n=20).

Ear Fissures

When asked if their Dachshund has ever suffered from ear fissures, out of 2,320 responses, 184 (7.9%) answered “Yes”, 2,038 (87.8%) answered “No” and 98 (4.2%) answered ‘Don’t know’.

The median age of the affected dogs when they first experienced clinical signs associated with ear fissures was 2 years old (min: less than 1 year old, max: 12 years old). Figure 39 shows a decrease in trend for cases of ear fissures as the age in years increases.

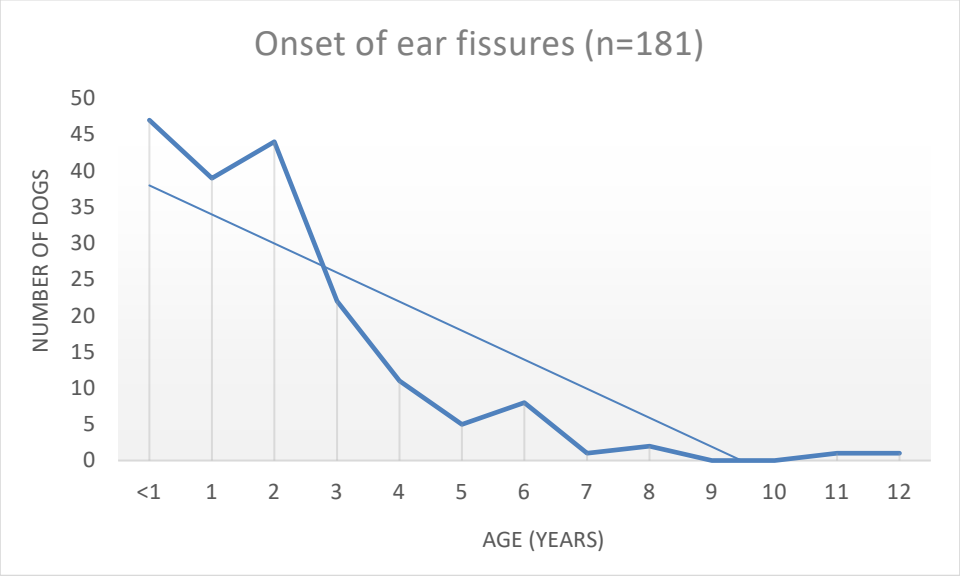

Figure 39: Onset of ear fissures, as reported in the survey

Figure 40 shows how often these dogs are affected by the condition, with the majority of owners reporting that their Dachshund is occasionally (e.g. yearly) affected by it (34.0%, 64 of 188).

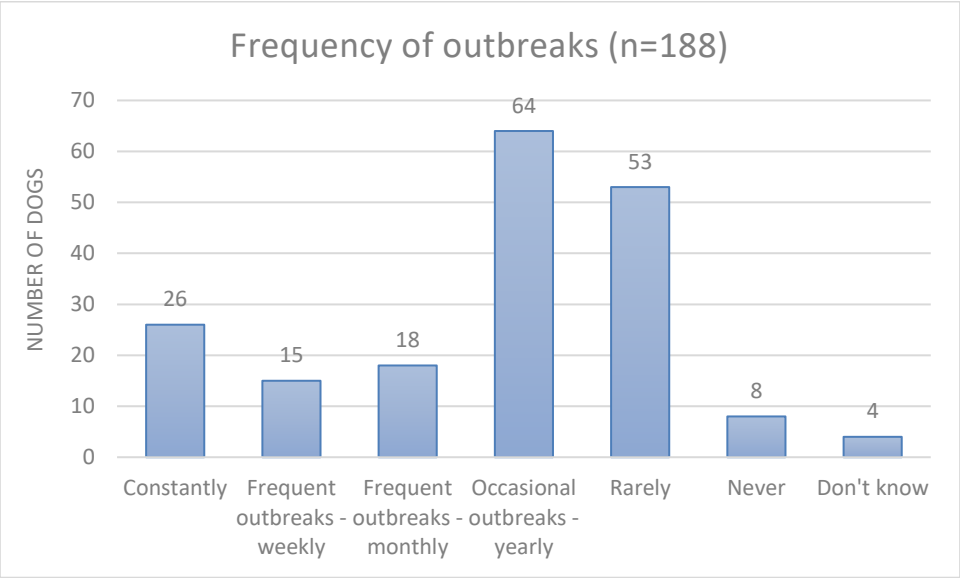

Figure 40: Frequency of ear fissure outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 190 responses, 92 (48.4%) answered “Yes”, 68 (35.8%) answered “No” and 30 (15.8%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s ear fissures were worse in the winter (52.0%, 64 of 123). A full breakdown of results are shown in Figure 41.

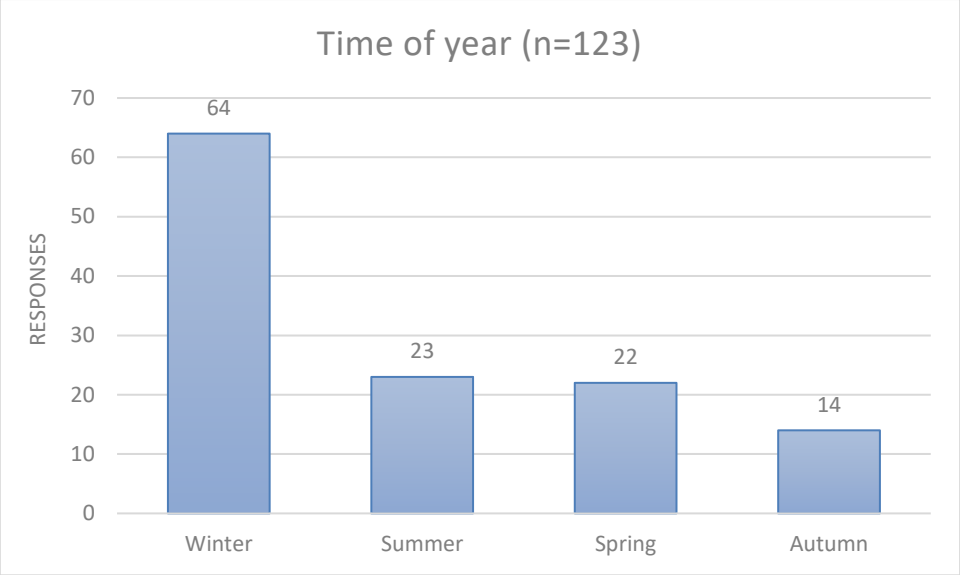

Figure 41: Time of year the problems associated with ear fissures worsened, as reported in the survey

The median age of the affected dogs when the suspected condition was confirmed by veterinary diagnosis was 2 years old (min: less than 1 year old, max: 12 years old). Figure 42 shows the method of diagnosis, the most frequently reported being visual diagnosis by veterinary surgeon (62.6%, 97 of 155).

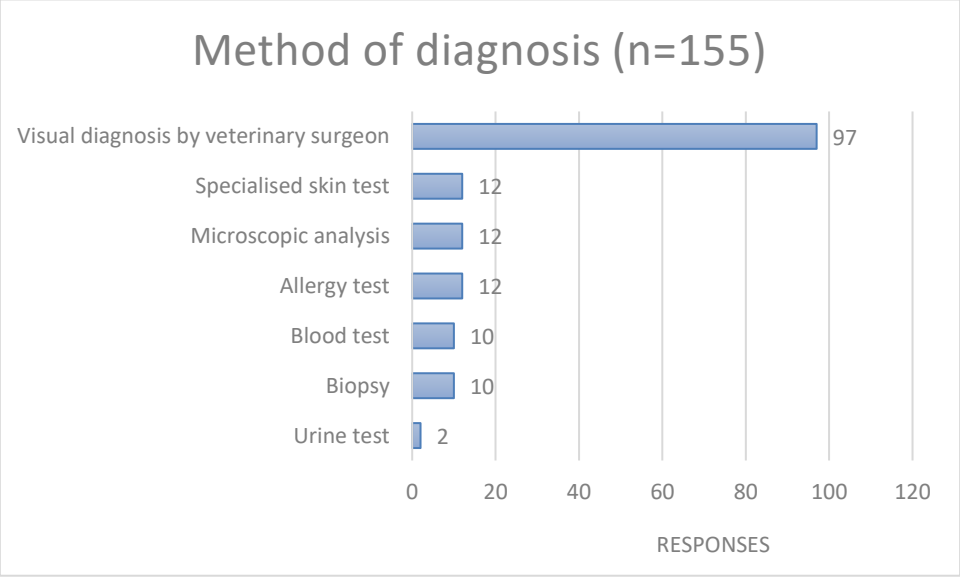

Figure 42: Method of diagnosis for ear fissures, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported treatment was prescriptive medication – temporary (22.1%, 42 of 190). A full breakdown of results are shown in Figure 43.

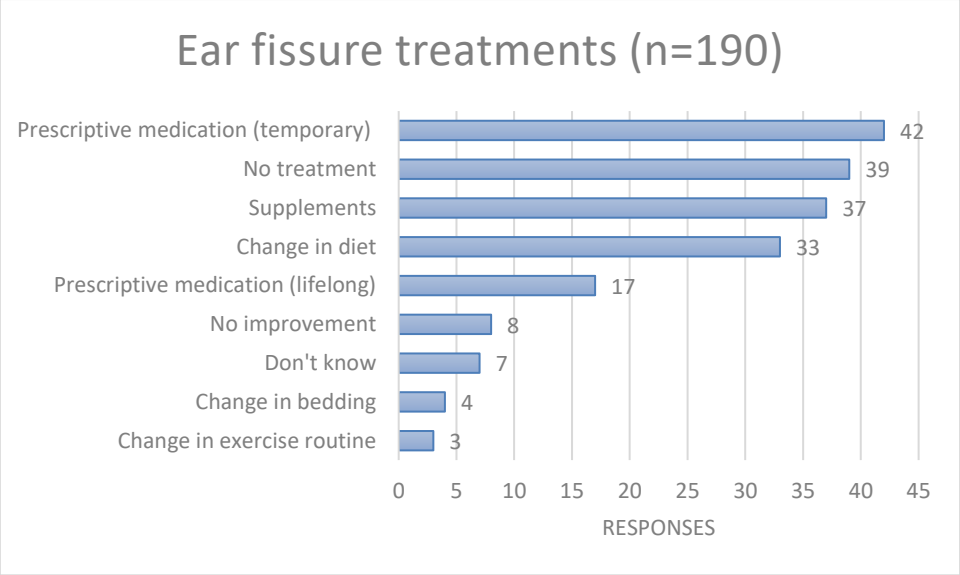

Figure 43: Treatments for ear fissures, as reported in the survey

The top prescriptive medications reported in the survey were: coconut oil (n=14), topical cream (unspecified) (n=8), shampoo/ malaseb (n=7), apoquel (n=6), and ear drops (n=4).

Colour Dilution Alopecia (CDA)

When asked if their Dachshund has ever suffered from colour dilution alopecia (CDA), out of 2,363 responses, 135 (5.7%) answered “Yes”, 1,900 (80.4%) answered “No” and 328 (13.9%) answered ‘Don’t know’. The overall prevalence for CDA (1.4%, 135 of 9,908) reported in this survey is greater than the overall prevalence reported in the DachsLife 2018 health survey (0.4%). *Please note, there was a high co-morbidity between CDA and patterned baldness in this survey indicating that owners were likely describing the same condition* ($p < 0.001$, OR 10.02 (95% CI 6.51-15.43)).

Figure 44 shows the percentage of dogs affected by CDA per colour. The results show that dilute colours are significantly more likely to be affected CDA compared to other coat colours with 85.7% (6 of 7) of isabella Dachshunds affected, 82.1% (23 of 28) of blue Dachshunds affected, and 50.0% (1 of 2) of blue dapple Dachshunds affected ($p < 0.001$, OR 77.27 (95% CI 33.16-180.02)).

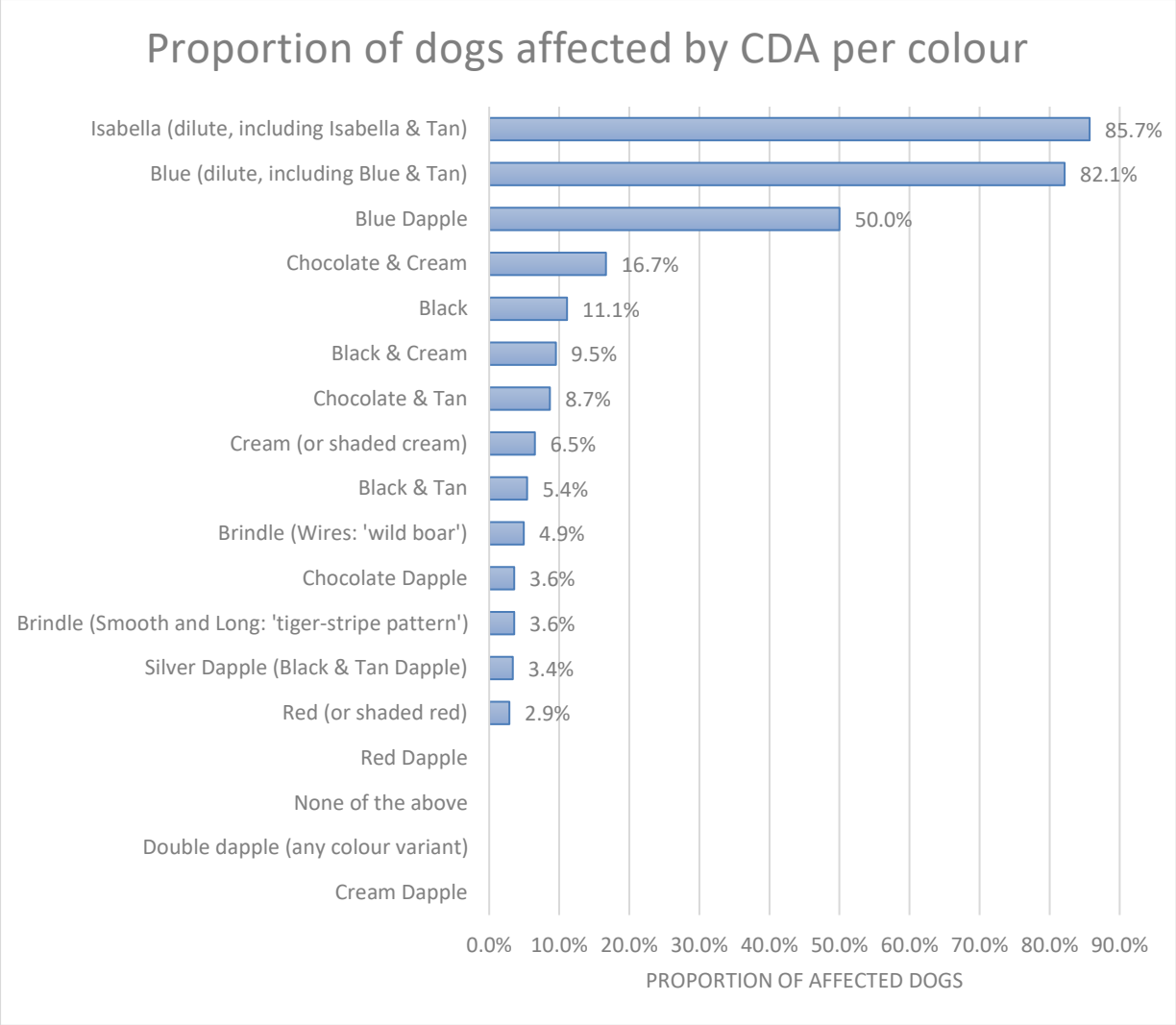

Figure 44: Proportion of dogs affected by CDA per colour, as reported in the survey

The median age of the affected dogs when they first experienced clinical signs associated with CDA was 2 years old (min: less than 1 year old, max: 12 years old). Figure 45 shows a decrease in trend for cases of CDA as the age in years increases.

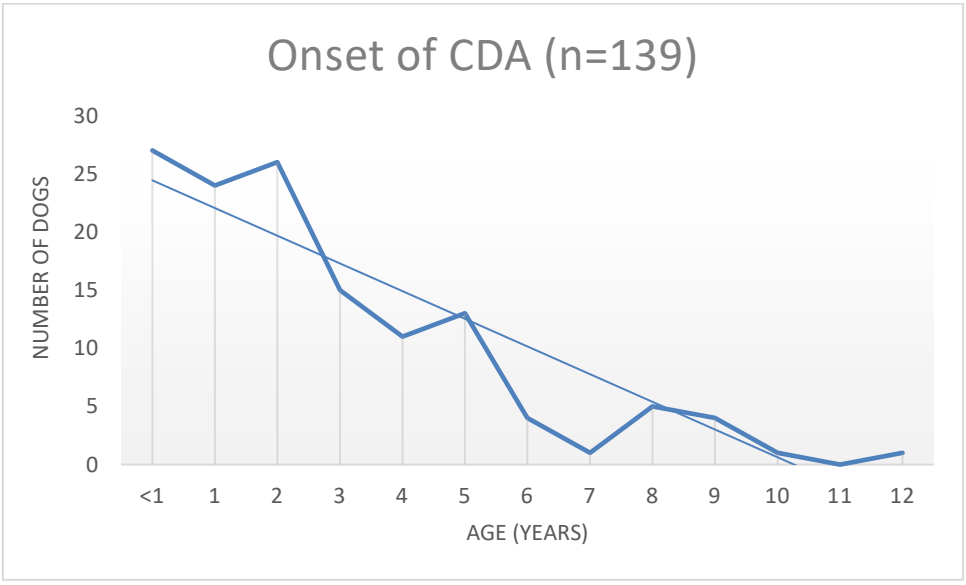

Figure 45: Onset of CDA, as reported in the survey

Figure 46 shows how often these dogs are affected by the condition, with the majority of owners reporting that their Dachshund is constantly affected by it (37.4%, 52 of 139).

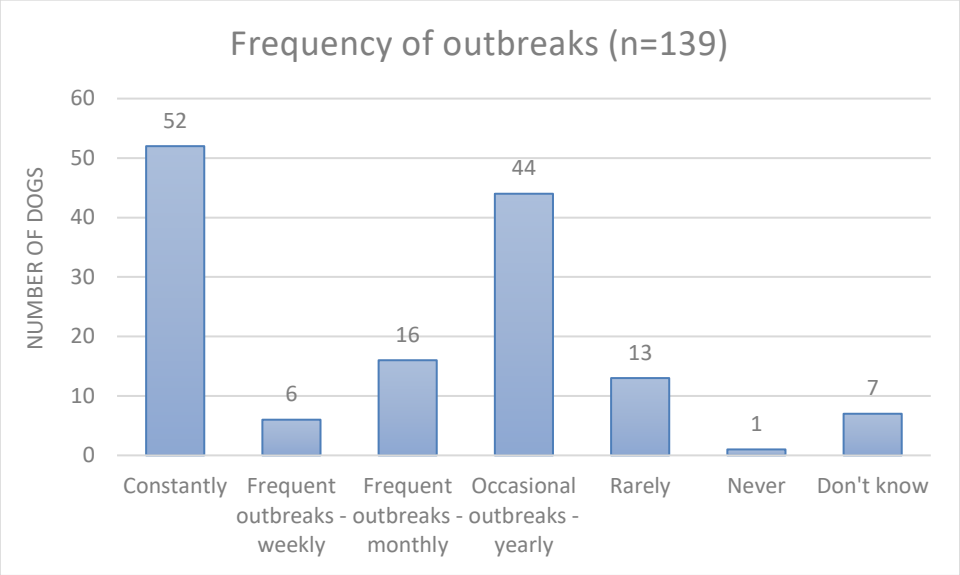

Figure 46: Frequency of CDA outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 140 responses, 60 (42.9%) answered “Yes”, 51 (36.4%) answered “No” and 29 (20.7%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s CDA was worse in the winter (41.5%, 34 of 82). A full breakdown of results are shown in Figure 47.

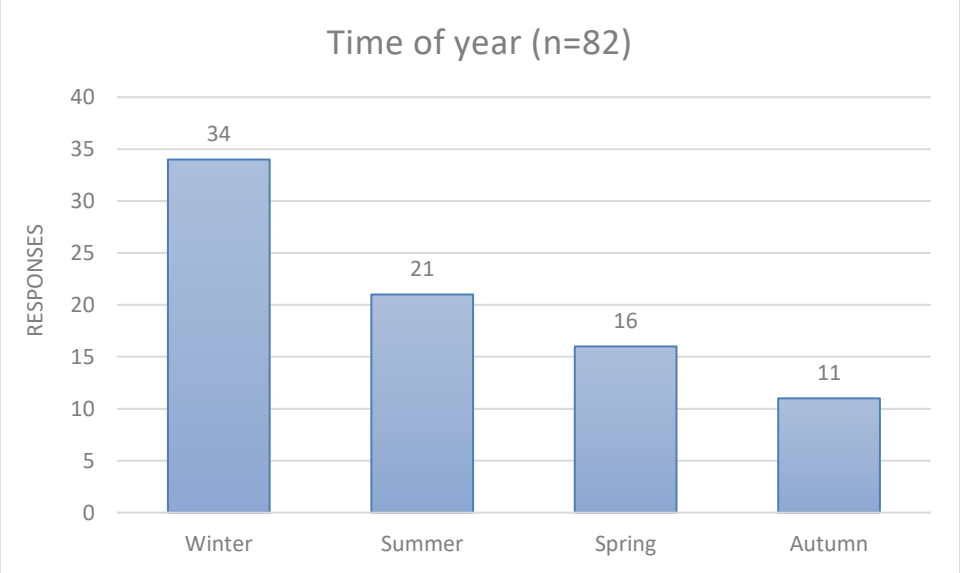

Figure 47: Time of year the problems associated with CDA worsened, as reported in the survey

The median age of the affected dogs when the suspected condition was confirmed by veterinary diagnosis was 2 years old (min: less than 1 year old, max: 12 years old). Figure

48 shows the method of diagnosis, the most frequently reported being visual diagnosis by veterinary surgeon (44.4%, 73 of 166).

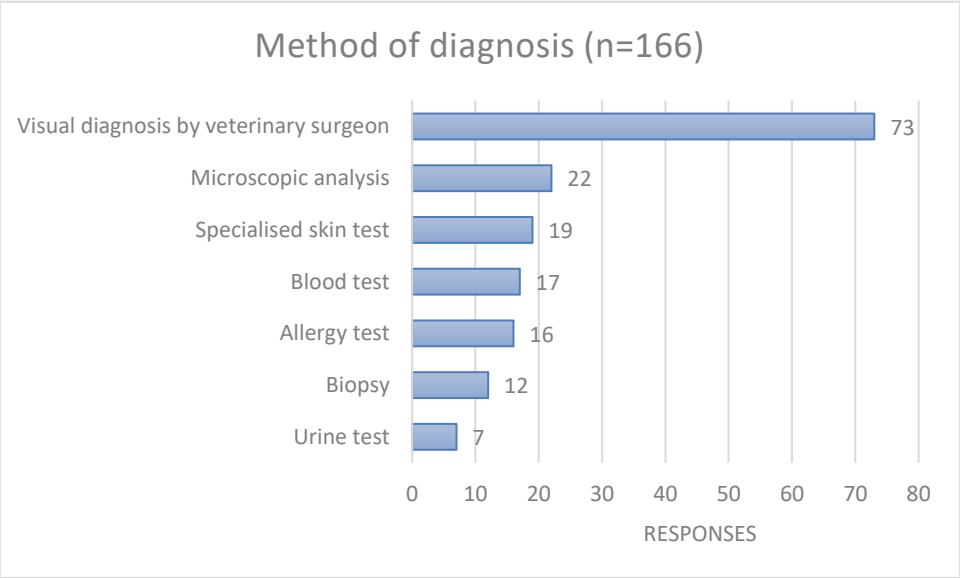

Figure 48: Method of diagnosis for CDA, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported treatment was a change in diet (21.2%, 36 of 170). A full breakdown of results are shown in Figure 49.

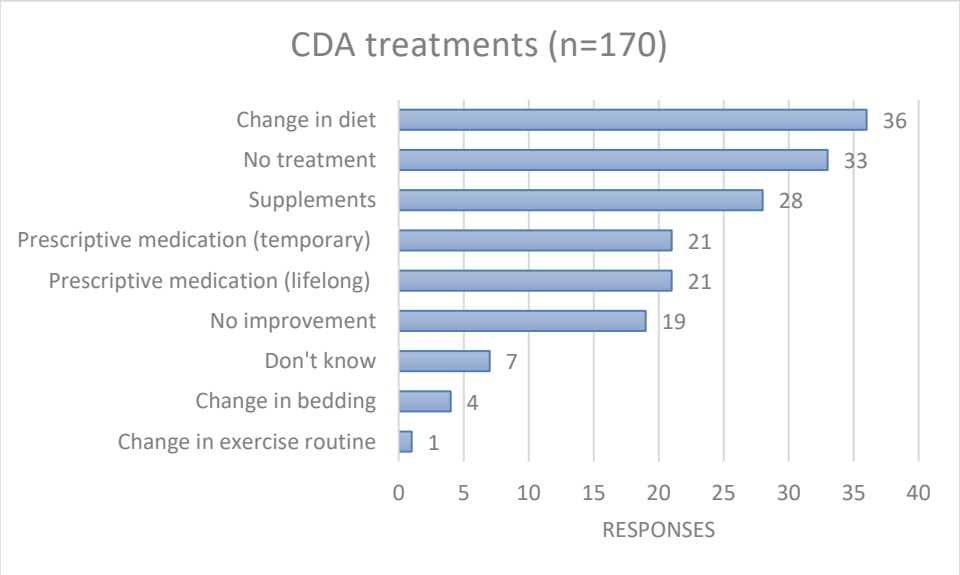

Figure 49: Treatments for CDA, as reported in the survey

The top prescriptive medications reported in the survey were: shampoo/ malaseb (n=6), coconut oil (n=3), topical cream (unspecified) (n=3), cytopoint injection (n=2), and apoquel (n=2).

Autoimmune Conditions

When asked if their Dachshund has ever suffered from an autoimmune condition, out of 2,367 responses, 101 (4.3%) answered “Yes”, 1,697 (71.7%) answered “No” and 569 (24.0%) answered ‘Don’t know’.

The results show that neutered dogs are more likely to be affected by an autoimmune condition, but weakly ($p = 0.03$, OR 1.66 (95% CI 1.05 – 2.63)).

Figure 50 shows the percentage of dogs affected by an autoimmune condition per colour. The results show that dilute colours are significantly more likely to be affected by an autoimmune condition ($p < 0.01$, OR 3.79 (95% CI 1.41-10.19)), in particular dogs with an isabella coat colour ($p < 0.01$, OR 8.55 (95% CI 1.55-47.25)) with 33.3% (2 of 6) of isabella Dachshunds in this survey being affected by an autoimmune condition. Unfortunately, there was not enough data to calculate an odds ratio for cream dapple Dachshunds being affected by an autoimmune condition.

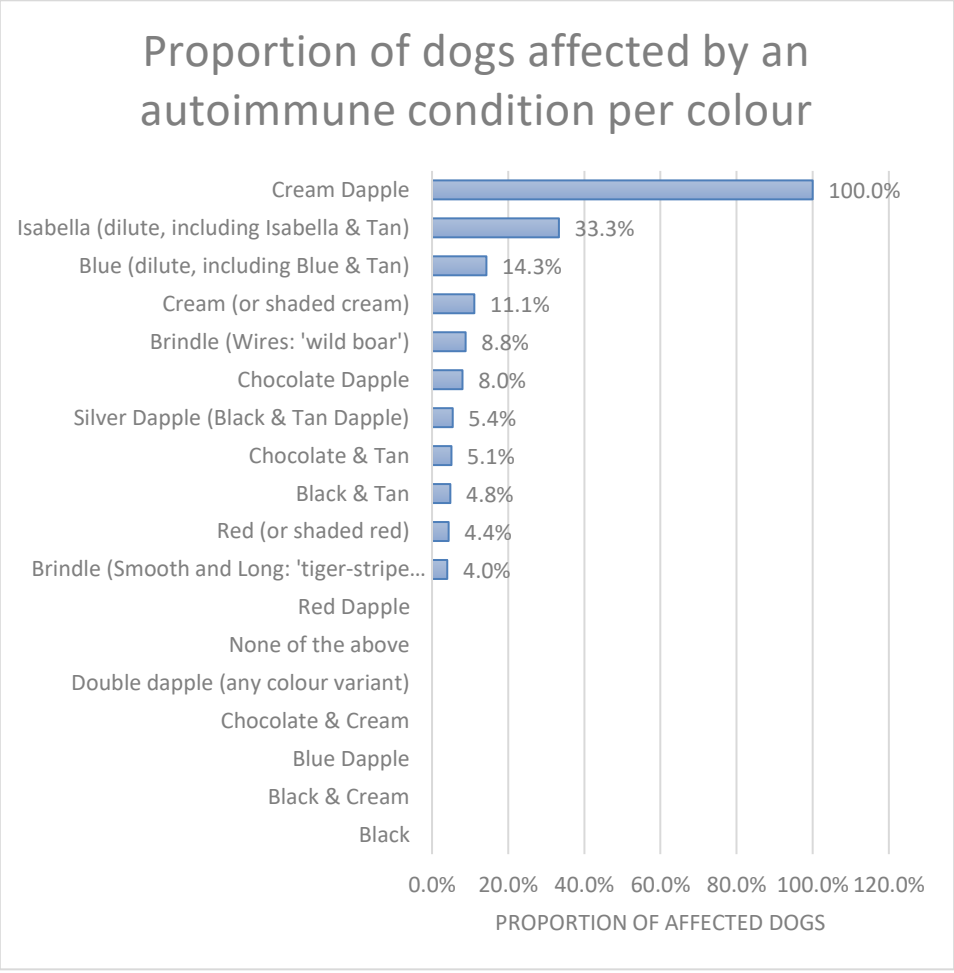

Figure 50: Proportion of dogs affected by an autoimmune condition per colour, as reported in the survey

The median age of the affected dogs when they first experienced clinical signs associated with their autoimmune condition was 2 years old (min: less than 1 year old, max: 14 years old). Figure 51 shows a decrease in trend for cases of autoimmune conditions as the age in years increases.

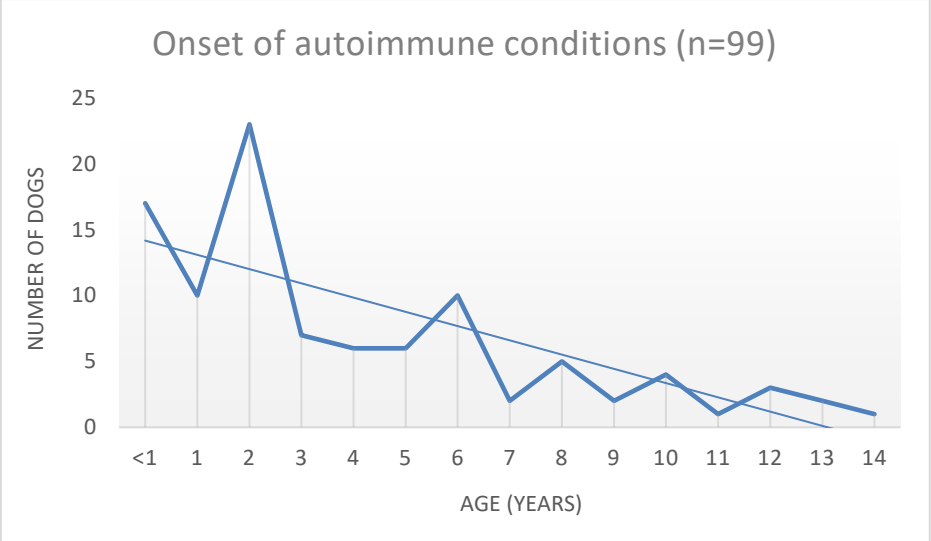

Figure 51: Onset of autoimmune conditions, as reported in the survey

Figure 52 shows how often these dogs are affected by the autoimmune condition, with the majority of owners reporting that their Dachshund is constantly affected by it (37.4%, 37 of 99).

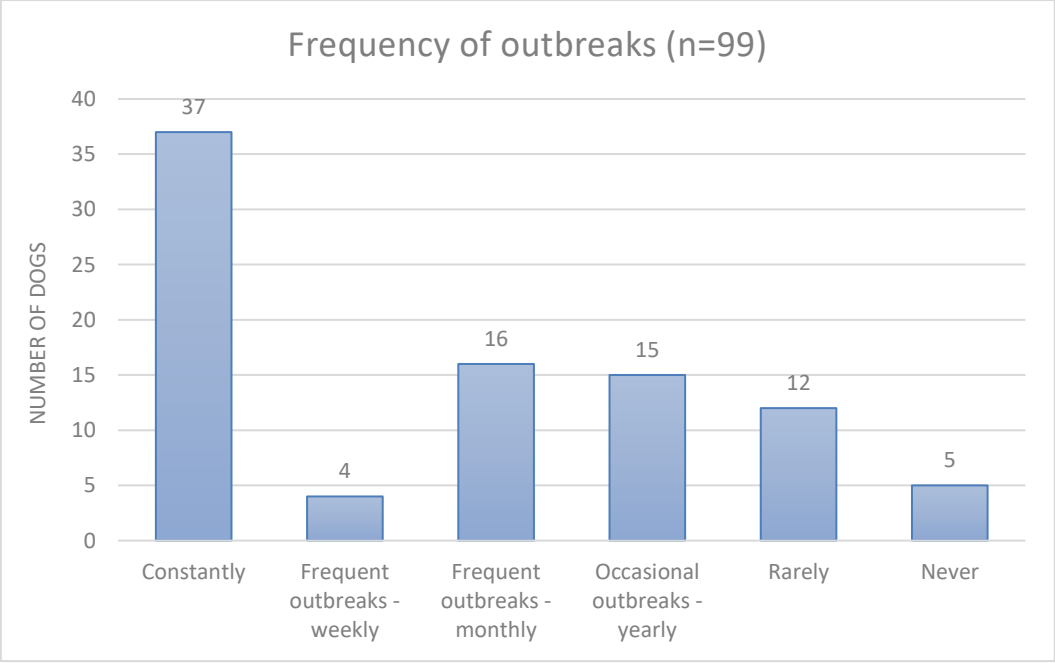

Figure 52: Frequency of autoimmune condition outbreaks, as reported in the survey

When asked if the problems are worse at a particular time of year, out of 100 responses, 29 (29.0%) answered “Yes”, 58 (58.0%) answered “No” and 13 (13.0%) answered ‘Don’t know’. The owners that answered ‘Yes’ were then asked to specify what time of year the problems worsened, and the majority reported that their Dachshund’s autoimmune condition was worse in the summer (37.0%, 17 of 46). A full breakdown of results are shown in Figure 53.

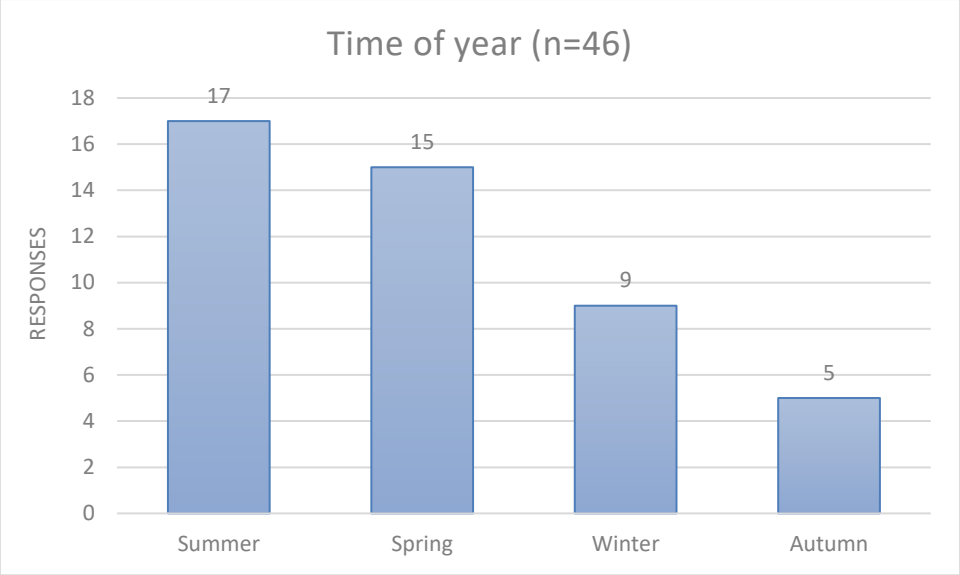

Figure 53: Time of year the problems associated with the autoimmune condition worsened, as reported in the survey

The median age of the affected dogs when the suspected autoimmune condition was confirmed by veterinary diagnosis was 3 years old (min: less than 1 year old, max: 15 years old). Figure 54 shows the method of diagnosis, the most frequently reported being blood test (26.6%, 51 of 192).

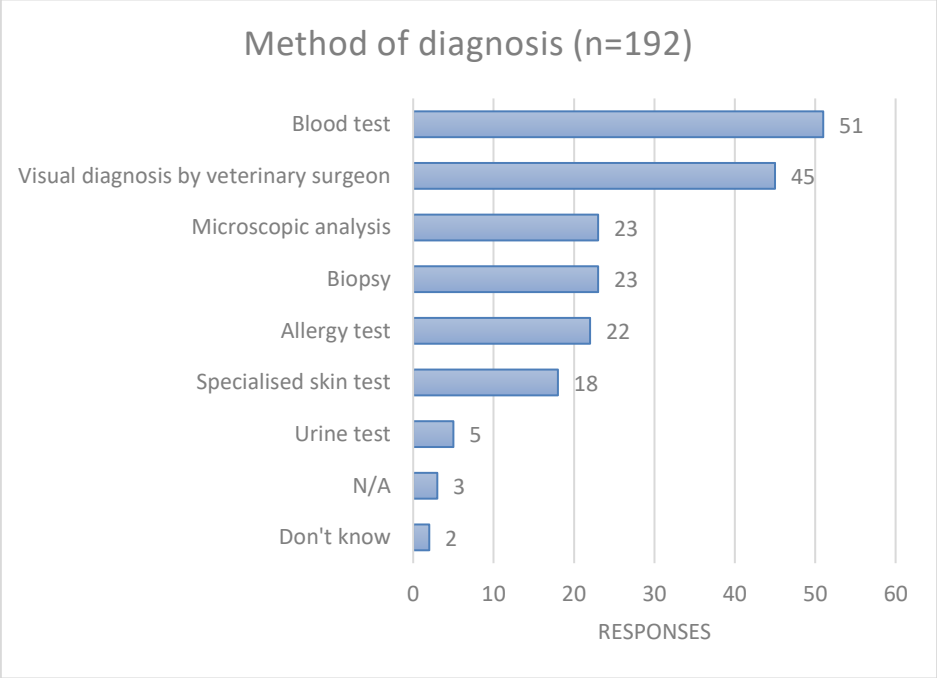

Figure 54: Method of diagnosis for the autoimmune condition, as reported in the survey

When asked what treatment(s) improved the severity of the autoimmune condition, the most frequently reported treatment was prescriptive medication – lifelong (32.8%, 45 of 137). A full breakdown of results are shown in Figure 55.

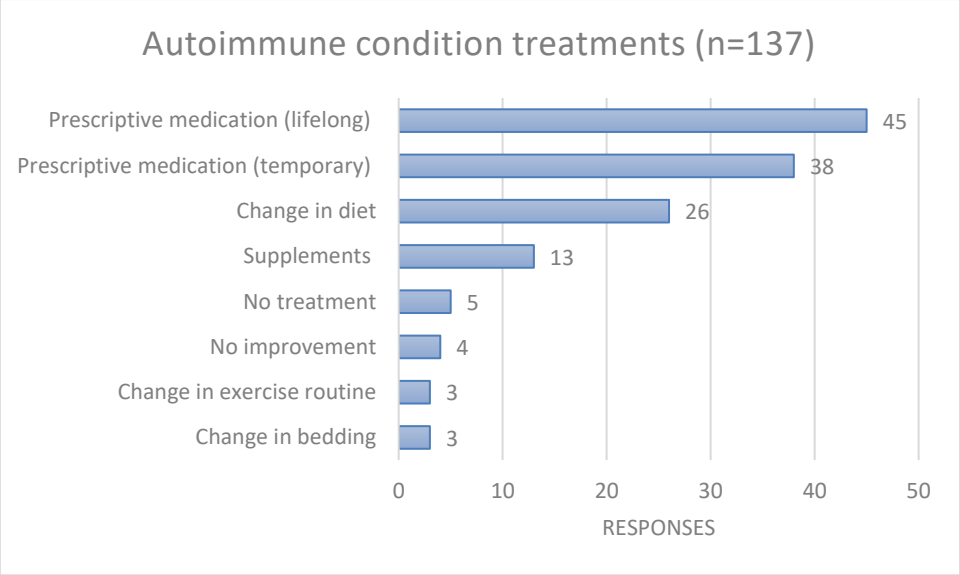

Figure 55: Treatments for the autoimmune condition, as reported in the survey

The top prescriptive medications reported in the survey were: prednisolone (n=8), steroid (unspecified) (n=6), apoquel (n=5), cytopoint injection (n=4), shampoo/ malaseb (n=3), and monthly injection (unspecified) (n=3).

Skin Cancer

When asked if their Dachshund has ever suffered from skin cancer, out of 2,229 responses, 22 (1.0%) answered “Yes”, 2,160 (96.9%) answered “No” and 47 (2.1%) answered ‘Don’t know’.

The median age of the affected dogs when they first experienced clinical signs associated with skin cancer was 9 years old (min: less than 1 year old, max: 15 years old). The median age of the affected dogs when the suspected condition was confirmed by veterinary diagnosis was also 9 years old (min: less than 1 year old, max: 15 years old).

Figure 56 shows the method of diagnosis, the most frequently reported being visual diagnosis by veterinary surgeon (32.4%, 12 of 37).

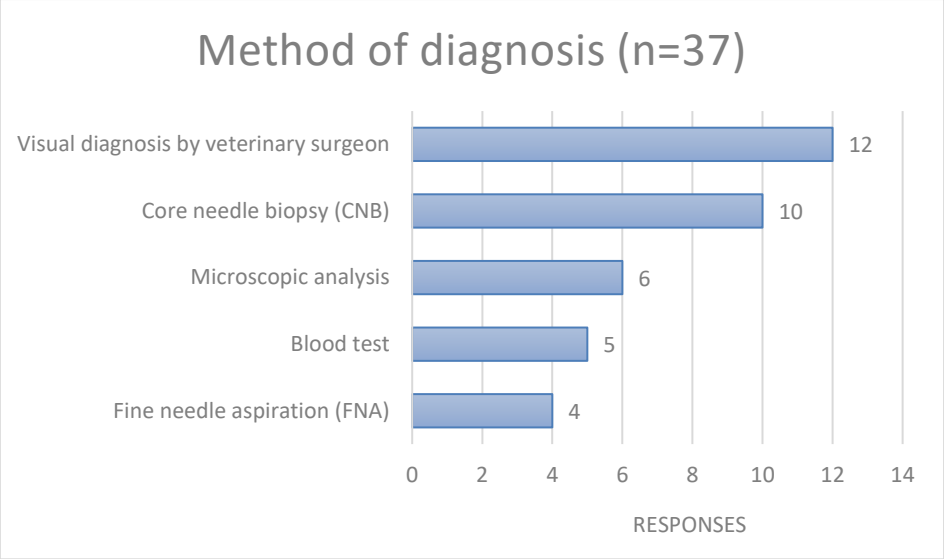

Figure 56: Method of diagnosis for skin cancer, as reported in the survey

When asked what treatment(s) improved the severity of the condition, the most frequently reported treatment was surgery – lump removal (67.9%, 19 of 28). A full breakdown of results are shown in Figure 57.

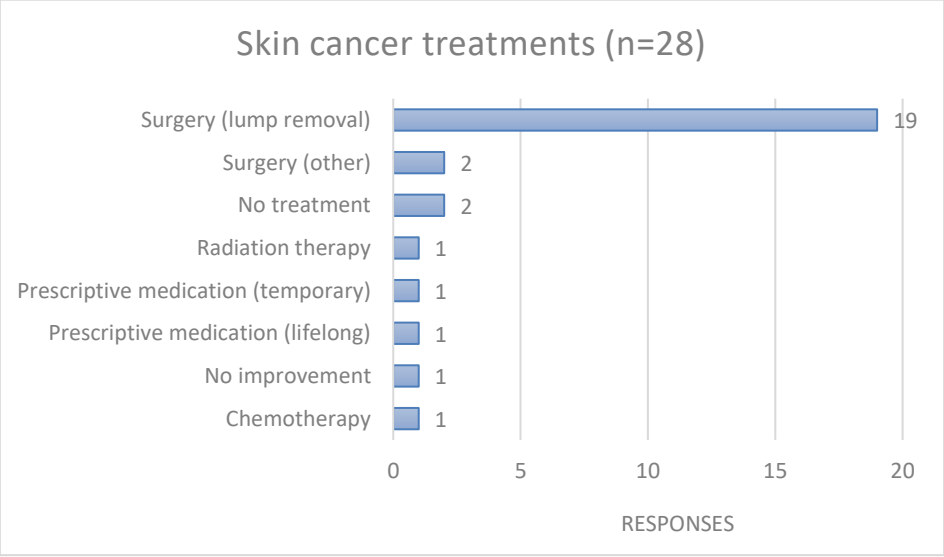

Figure 57: Treatments for skin cancer, as reported in the survey

The other surgeries reported in the survey were: neutering (n=2).

Additional skin conditions not listed in survey

The respondents were provided with the opportunity to note any skin and/or coat conditions not already covered by the previous questions. The conditions listed from the owners were:

One report of dandruff

One report of yeast infection

One report of wart-like lumps

Intervertebral disc disease (IVDD)

When asked if their Dachshund has ever suffered from intervertebral disc disease (IVDD), out of 8,542 responses, 937 (11.0%) answered “Yes”, 7,605 (89.0%) answered “No”. This overall prevalence is less than the overall prevalence reported in the DachsLife 2018 health survey (12.7%).

The median age of the affected dogs when they first experienced clinical signs associated with IVDD was 5 years old (min: less than 1 year old, max: 15 years old). Figure 58 shows an initial increase in cases of IVDD up to 5 years of age followed by a decrease in cases.

Please note that nearly half of the dogs included in this survey were under the age of 4, which is below the general risk age for developing IVDD.

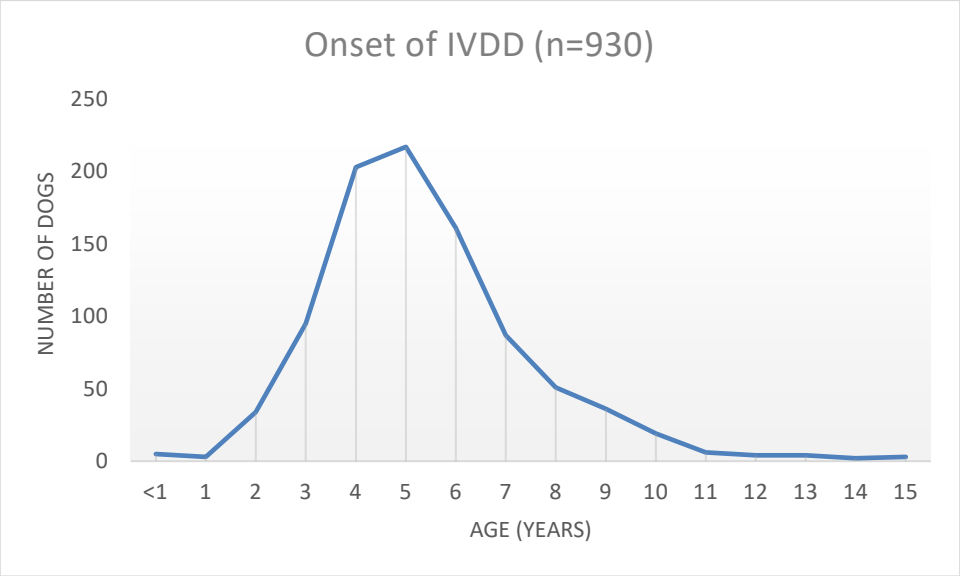

Figure 58: Onset of IVDD, as reported in the survey

Dogs under the age of 4 were excluded from the following analysis as they are, in general, less likely to have IVDD. Out of 4,354 dogs, that were 4 years or older, 910 (20.9%) had been affected by IVDD at some point in their lifetime. This is less than the overall prevalence reported in Dachshunds over the age of 3 in the DachsLife 2018 health survey (21.1%).

Of these dogs, 485 (53.3%) were male and 425 (46.7%) were female. The most common Dachshund variety affected by IVDD was Miniature Smooth Haired (62.3%, 567 of 910), followed by Miniature Wire Haired (12.1%) and then Miniature Long Haired (10.7%). A full breakdown of results are shown in Figure 59.

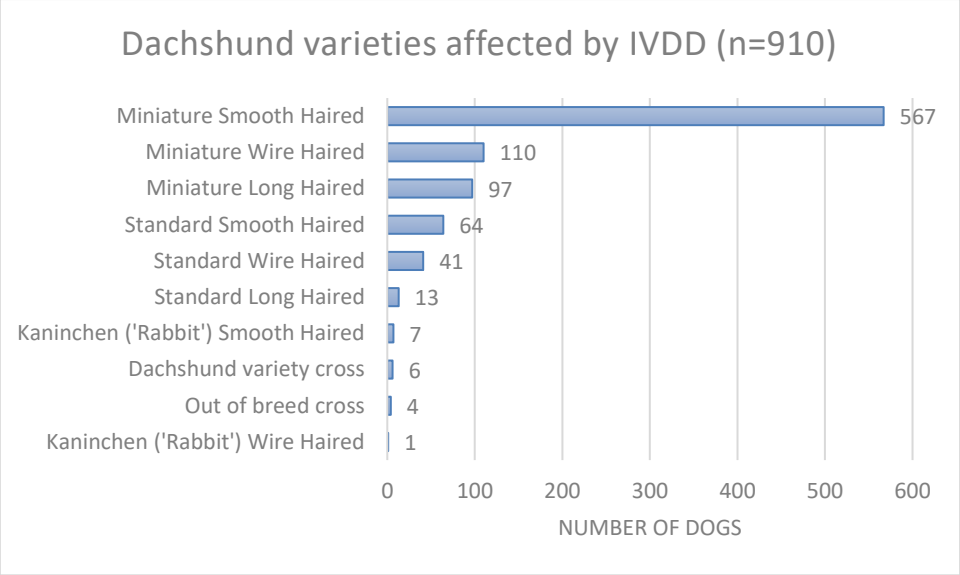

Figure 59: Dachshund varieties affected by IVDD, as reported in the survey

Previous reports suggest that neutering increases the risk of developing IVDD (Packer et al, 2016). Of the dogs in the survey that were 4 years or older and affected by IVDD, 717 (78.8%) were neutered and 191 (21.0%) were entire. Of the known ages for neutering, 39.7% (276 of 696) were neutered under the age of 1 and 63.5% (442 of 696) were neutered under the age of 2. The results from this survey support previous reports and show that neutered dogs are significantly more likely to be affected by IVDD ($p < 0.001$, OR 1.85 (95% CI 1.55 – 2.20)).

References

Packer, R.M.A., Seath, I.J., O'Neill, D.G., Decker, S.D., Volk, H.A. (2016) DachsLife 2015: an investigation of lifestyle associations with the risk of intervertebral disc disease in Dachshunds. *Canine Genetics and Epidemiology* **3(8)**