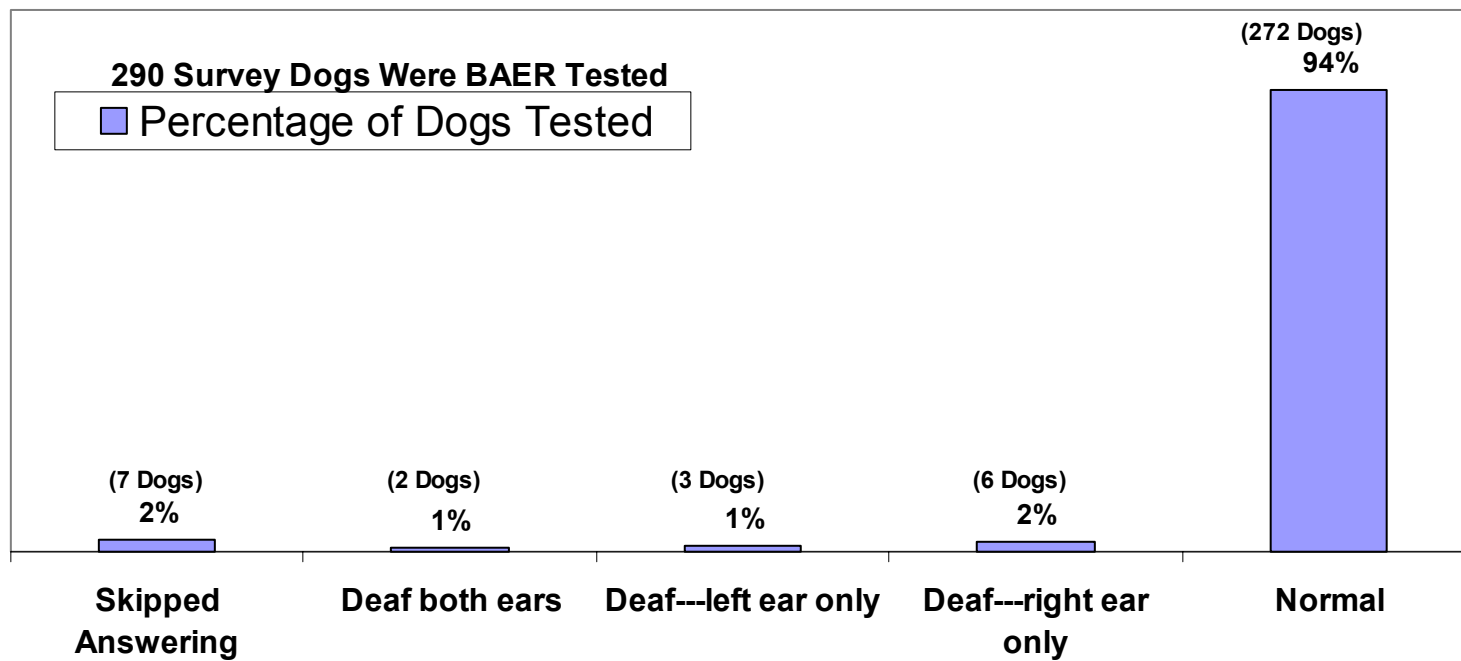


Ears

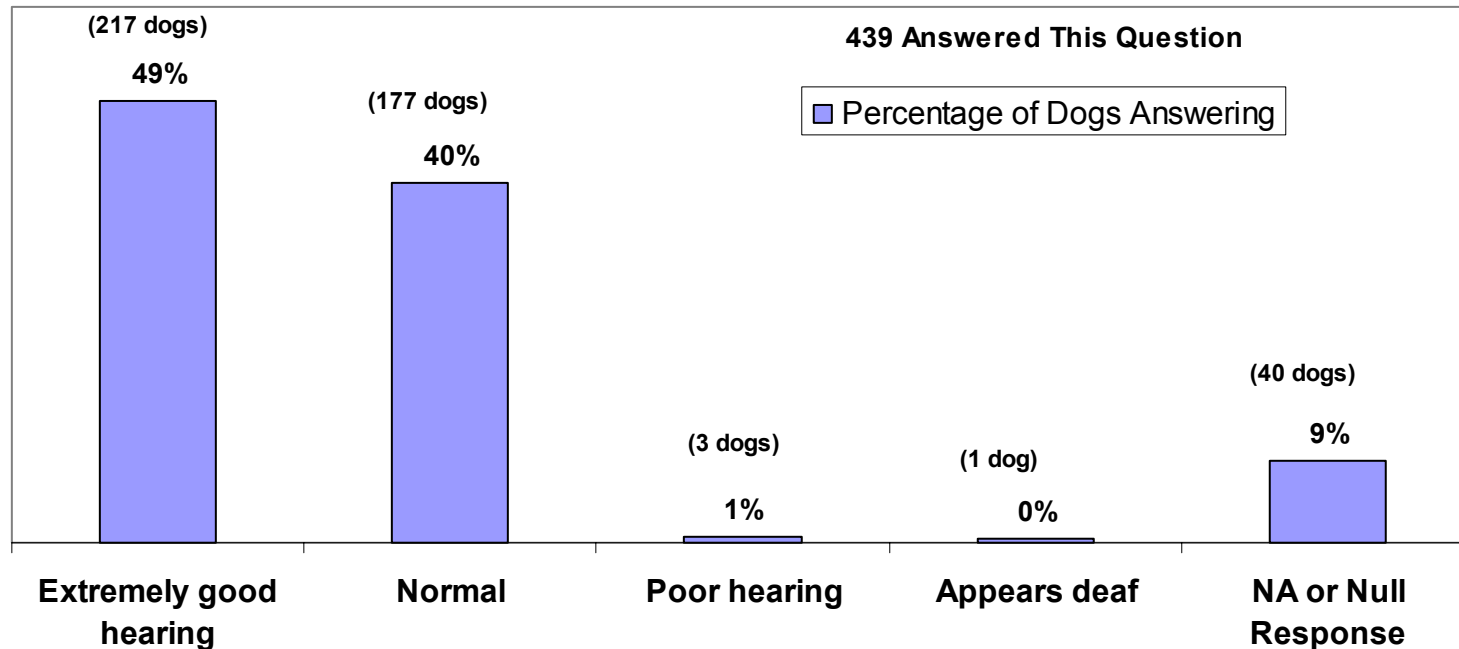


Surveyed Havanese BAER Test Results

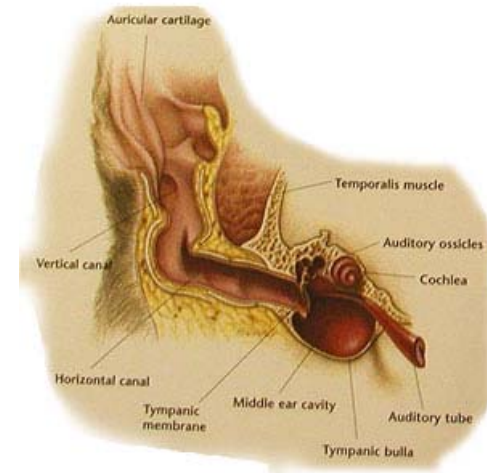


Ears

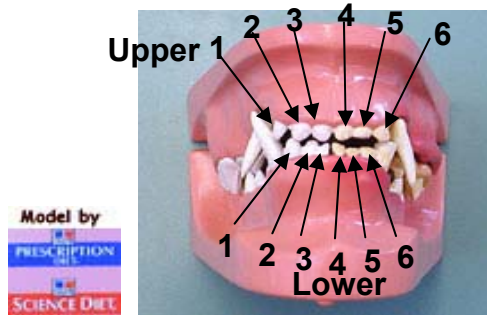
Reported Level of Hearing in Survey Havanese NOT BAER Tested



Dogs who do not hear in one ear are almost impossible to identify in your home. Known as unilaterally deaf, nine were identified in the dog population (290 dogs) that was BAER tested. If that same ratio is true for the untested dogs that appear normal (434 dogs), there could be about 14 unilaterally deaf dogs “hiding” and undetected among the untested dogs.

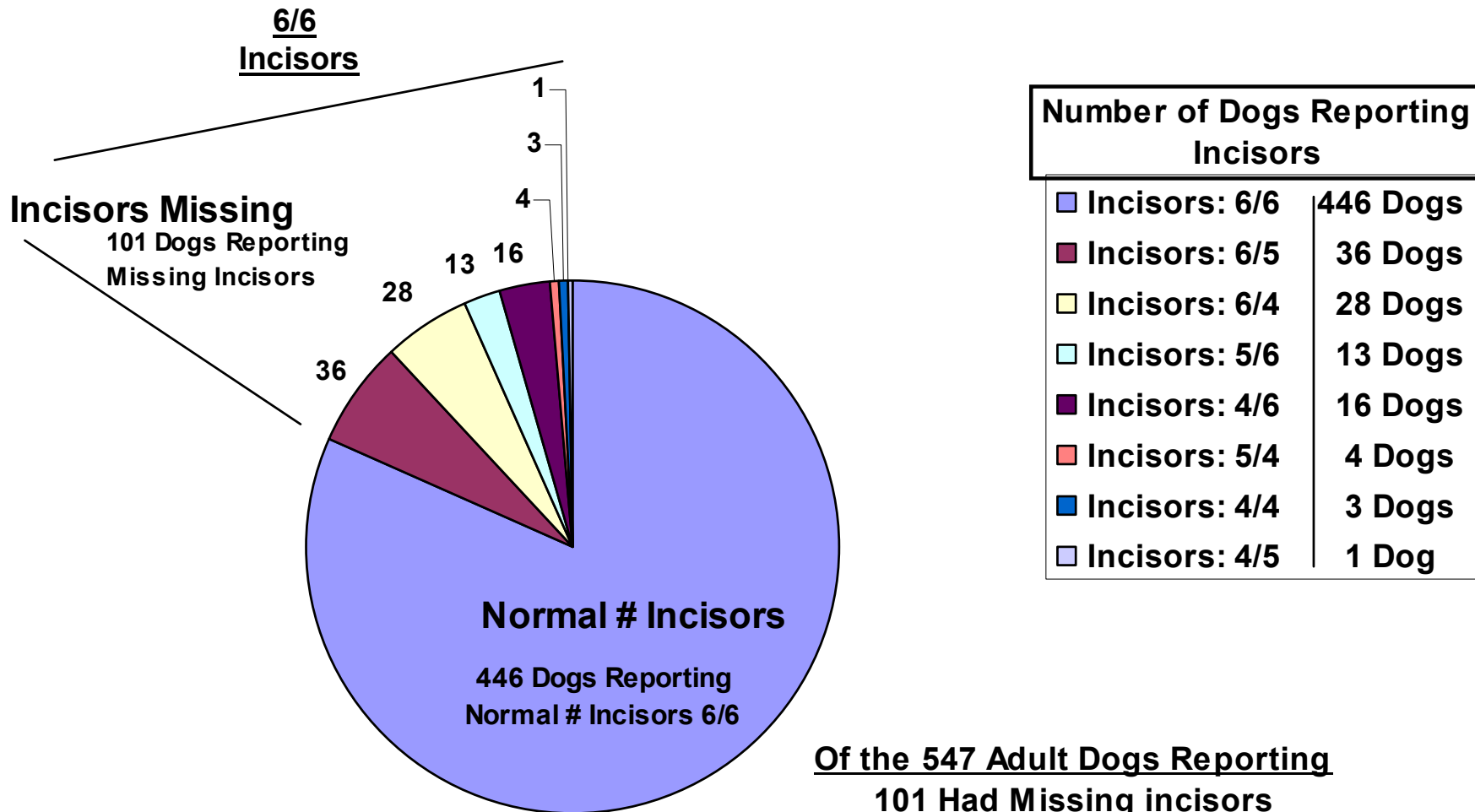


Dental



Q 6.1

Incisor Numbers Reported in Adult Havanese

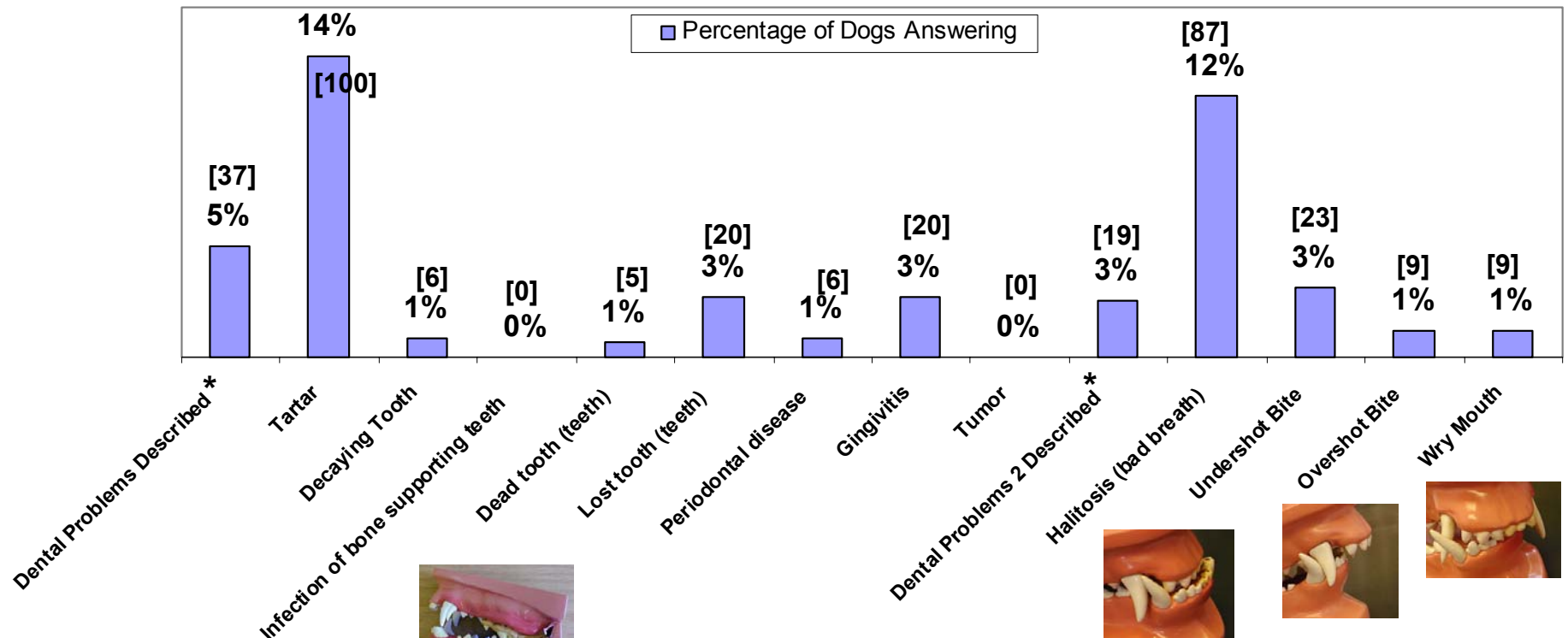


Of the 547 Adult Dogs Reporting
101 Had Missing incisors
446 Had Normal # incisors

Dental



Q 6.2, 6.3, 6.4 Number of Dogs Reporting Dental Problems (725 Answering)



*See Appendix D for answers to “Other, Please Describe” that were typed by the Survey participants.

Musculoskeletal

•Hips



Normal Hips-femoral heads are well seated into acetabuli that fit them well

7.1 Hips X-rayed (733 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	212	521	23
% of Dogs Answering	29%	71%	3%

7.2 Hips X-rayed By (210 Answered)			
	General Vet	Orthopediac Specialist	Didn't Answer
Number of Dogs	139	71	2
% of Dogs X-rayed	66%	33%	1%

7.3 If X-Rayed, Hips Diagnosed (198 Answered)			
	Normal	Abnormal	Didn't Answer
Number of Dogs	183	15	14
% of Dogs X-rayed	86%	7%	7%

7.5 If X-rayed, Sent to OFA (197 Answered)			
	Yes	No	Didn't Answer or N/A Checked
Number of Dogs	143	54	15
% of Dogs X-rayed	67%	25%	7%



Hip dysplasia-note shallow acetabulum and luxation of right femoral head (on viewer's left.)

7.6 If X-rayed, OFA Rating (154 Gave Rating or Penn Hip)									
	Excellent	Good	Fair	Borderline	Mild	Moderate	Severe	Other, Pending or PennHip	Didn't Answer
Number of Dogs	23	82	20	1	3	0	1	24	58
% of Dogs X-rayed	11%	39%	9%	0%	1%	0%	0%	11%	27%

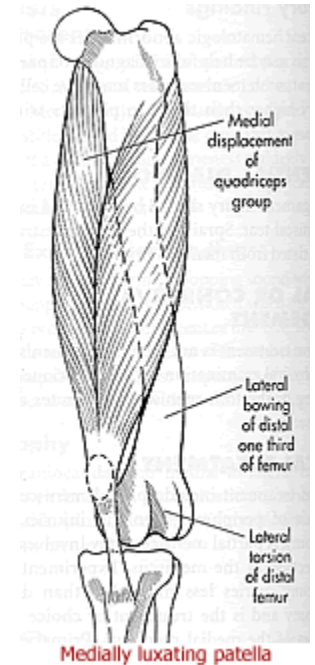
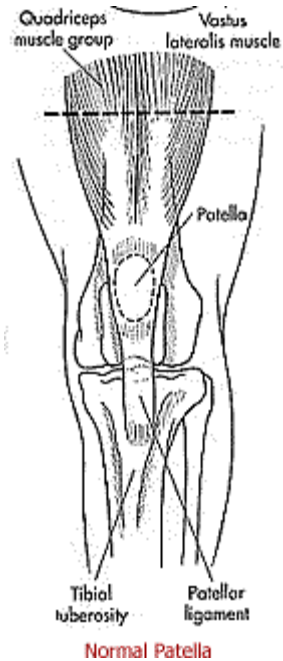
Musculoskeletal

•Patellas

7.7 Patellas Examined (707 Answered)				
	Yes	No	Didn't Answer	Number of Normal Patellas
Number of Dogs	542	165	49	490
% of Dogs Answering	77%	23%	7%	69%

7.10 "If the patellas were examined by a vet, were the results submitted to OFA?"			
	Yes	No	Didn't Answer or N/A
Number of Dogs	136	188	218
% of Dogs Examined	25%	35%	

7.8, 7.9 Patella Problems						
Condition	Number of Dogs	Number of Grade 1	Number of Grade 2	Number of Grade 3	Number of Grade 4	Number of Grade 5
Left patellar luxation, medial	8 (includes dog "A")	3	2			
Left patellar luxation, lateral	1	1		1		
Right patellar luxation, medial	5	1	1	1		
Right patellar luxation, lateral	3 (includes dog "A")	1	2			
Bilateral patellar luxation, medial	6	4				
Bilateral patellar luxation, lateral	4	2				
Other*	11	1	1			
Total Dogs with Patella Problems	37	* See Appendix E for tables of the answers that were typed into the Survey by participants.				



Musculoskeletal

•Forelegs

Eight dogs in the Survey were reported as examined by a vet &/or specialist and diagnosed as having chondrodysplasia (CD). Leg structural anomalies that are often associated with CD were reported on the dogs in the survey: Bowing [141], Elbows sticking out [70], elbow dysplasia [4], and early growth plate closure [2]. Some dogs reported more than one of these conditions.

7.11 Bowing (734 Answered)				
	Number of Dogs	Extreme Bowing	Slight Bowing	Didn't Specify Extreme or Slight
Two Front Legs Bowed	70	6	44	20
Left Leg Bowed	29		15	14
Right Leg Bowed	23	1	10	12
Other (Includes why 8 dogs are straight*)**	26	1	5	20



Shown above are 3 Havanese fronts
Below are the same 3 fronts as seen on x-rays



Normal Moderate CD with asymmetry Severe CD

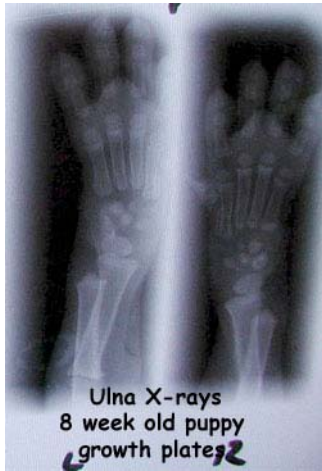
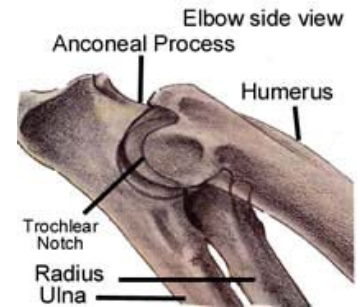
	Number of Dogs	% of Dogs Answering*	Confident in Answer	Unsure in Answer	Didn't Specify Confident or Unsure
Both Legs Straight	488	66%	312	19	157
Any Bowing	141	19%	73	12	56
No One Has Noticed Bowing	87	12%	7	4	76
Other (Includes why 8 dogs are straight*)**	26	4%	4	1	21

* 8 dogs were reported as having front legs that were both bowed and straight both at the same time. Because of the impossibility of this occurring, the 8 dogs were omitted from the tally.

** See Appendix E for tables of the answers that were typed into the Survey by participants.

Musculoskeletal

•Forelegs



7.12 Evaluation of Left and Right Leg Length (671 Answered)				
	Number of Dogs	Confident In Answer	Unsure in Answer	Didn't Specify, Confident or Unsure
Right Elbow Out or Toes Out	25	13	2	10
Left Elbow Out or Toes Out	29	13	2	14
Both Elbows Stick out	16	8	1	7
Straight and Equal	472	294	14	164
No One Noticed	112	5	3	104
Other*	30	3	2	25



7.13 X-rayed (710 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	51	659	46
% Answering Q	7%	93%	6%

7.14 If Yes, Evaluated By (51 Answered)			
	General Vet	Ortho	Didn't Answer
Number of Dogs	32	19	0
% Evaluated By	63%	37%	0%

7.15 Of Dogs X-Rayed, Diagnosis (40 Answered)		
Condition	Number of Dogs	% of Dogs X-rayed with Condition
Normal (straight and equal)	19	37%
No Elbow Dysplasia	7	14%
Chondrodysplasia	8	16%
Bowing	3	6%
Early Growth Plate Closure	2	4%
Elbow Dysplasia	1	2%

* See Appendix E for tables of the answers that were typed into the Survey by participants.

Musculoskeletal

•Legg Calve Perthes



Note malformation of R femoral head with decreased bone density (on viewer's left) in this dog with LCP

Q 7.16 Diagnosed with LCP? (678 Answered)						
	Yes	No	Didn't Answer	LCP right	LCP left	LCP both
Number of Dogs	7	671	78	6	0	1
% Answering	1%	99%				

•Skeletal Size

7.22 Skeletal Size (630 Answered)				
	Fine	Medium	Heavy	Didn't Answer
Number of Dogs	135	412	83	126
% of Dogs Answering	21%	65%	13%	20%

•Dew Claws

7.23 Were There Dewclaws on Hind Legs? (691 Answered)		
Condition	Number of Dogs	% of Dogs Answering
Yes at Birth, have been removed	34	5%
Yes at Birth, still present	68	10%
Not present at birth	212	31%
Don't know if present at birth	375	54%
Other*	2	0%

* See Appendix E for tables of the answers that were typed into the Survey by participants.

Musculoskeletal

•Additional, including hernia

7.18 Does this Dog Have Additional Musculoskeletal Problems? (657 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	27	630	99
% of Dogs Answering	4%	96%	15%

7.19 "Describe Any Additional Musculoskeletal Problems of This Dog"	
	4
	3
	1
	1
	0
	14
Valgus or Varus deformity	1
Chondrodysplasia (vet and/or owner diagnosed)	32
Other	20

7.20 Hernia Type (14 answered)	
Type	Number of Dogs
Umbilical	10
Inguinal	0
Perineal	1
Don't Know	1
Other*	2



7.21 Surgery Required to Correct the Musculoskeletal Problem? (671 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	21	650	85
% of Dogs Answering	3%	97%	13%

* See Appendix E for tables of the answers that were typed into the Survey by participants.

Skin



Q. 8.6 Do You Groom Your Own Dog? (709 Answered)		
	# of Dogs	% of Dogs Answering
Yes	678	96%
No	30	4%

678 Survey Takers do their own grooming, so they probably are quite observant, giving good answers about their dog's skin conditions.

14 Dogs reported skin problems that were vet tested and diagnosed. 84 Havanese reported skin problems some of which were diagnosed by a vet and while others were not.

On the following page, diagnosed skin conditions are grouped according to whether they were found in conjunction with other conditions. Hot spots and dry flaky skin are more frequently found alone on the dogs' skin whereas sebaceous adenitis is often associated with other skin conditions.

Skin



**Q 8.5 Skin Conditions of Havanese Reported in the Survey
(729 Answered These Questions)**

Condition	# of Dogs	% of Dogs	Q 8.1, 8.3 No Vet Exam/ No Testing	No Vet Exam/ Yes Testing	Vet Exam/ Yes Testing	Vet Exam/ Observation or No Testing
Dry Flaky Skin	33	5%	17	0	11	5
Sebaceous Adenitis	7	1%	1	0	5	1
Hot Spots	13	2%	4	0	4	5
Other	25	3%	9	2	5	9

Total # of Dogs (Out of 729)	Q 8.5 Combinations of Skin Conditions And The Number of Dogs With The Combination			
33	Dry Flaky Skin	Dry Flaky Skin	Dry Flaky Skin	Dry Flaky Skin
		& SA	& Hot Spots	& SA
				& Hot Spots
	25	3	3	2
7	Sebaceous Adenitis (SA)	SA	SA	SA
		& Dry Flaky Skin	& Hot Spots	& Dry Flaky Skin
				& Hot Spots
	1	3	1	2
13	Hot Spots	Hot Spots	Hot Spots	Hot Spots
		& SA	& Dry Flaky Skin	& SA
				& Dry Flaky Skin
	7	1	3	2
25	See Appendix F for the list of "Other Skin Problems" that were entered in the Survey.			

Allergies



8.8 "Does this Havanese Have Allergies?" (713 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	86	627	43
% Answering	12%	88%	

8.10 "Were Allergies Diagnosed by Vet?" (641 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	56	585	115
% of Dogs Reporting Allergies	65%		

8.9 Allergy Type Reported in Dogs with Allergies (86 dogs)					
	Inhalant	Contact	Food	Other	Dogs reporting at least 1 type of allergic reaction
Number of Dogs	22	17	39	28	79
% of Dogs Reporting Allergies	26%	20%	45%	33%	92%

8.12 Types of Tests That Were Used For Allergy Testing On the Dogs Reporting Allergies						
	Interdermal Skin	Blood Test	Diet Elimination	Skin Biopsy	Other	More than one test
Number of Dogs	4	17	26	5	2	9
% of Dogs Reporting Allergies	5%	20%	30%	6%	2%	10%

8.11 "How Were the Allergies Diagnosed?" (86 dogs)			
	By symptoms alone	By allergy testing alone	Didn't Answer
Number of Dogs	62	16	678
% of Dogs Reporting Allergies	72%	19%	

Allergies

8.13 Occurrence and Frequency of Ear Infections (609 Answered)					
	None	Few	Many	Chronic	Other
Number of Dogs	435	147	10	8	38
% Answering	68%	23%	2%	1%	6%

8.14 "Has This Havanese Ever Had An Allergic Reaction?" (672 Answered) From an earlier question, 86 dogs or 12% in the Survey report allergies.			
	Yes	No	Didn't Answer
Number of Dogs	77	595	84
% 672 dogs Answering	11%	89%	

8.13a Number of Dogs With <u>Both Allergies and Frequent Ear Infections</u>		
	Chronic Infections	Many Infections
Number of Dogs	3	4



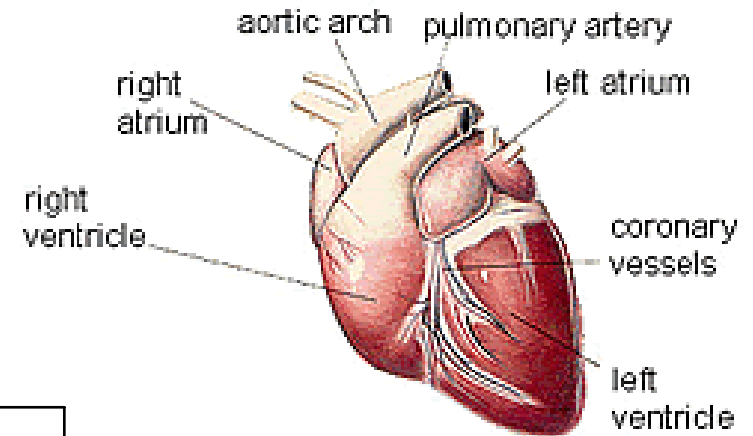
8.15 "What <u>Caused</u> the Allergic Reaction In 86 Dogs With a Allergies?" (Allergic dogs may react to more than one thing.)						
	Drug	Vaccination	Insect	Unknown	Food	Shampoo
Number of Dogs	20	50	14	8	6	3
% of Dogs Reporting Allergies	23%	58%	16%	9%	7%	3%

8.16 Type of Allergic Reactions Reported							
	Hives	Shock	Vomiting	Diarrhea	Hot spots	Itching Inflammation	Other*
Number of Dogs	9	10	20	9	5	43	32

* See Appendix G for comments about "Q 8.16 Other Allergic Reactions" entered in the Survey by the participants.

Heart

Q 9.1 Heart Examined (728 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	606	122	28
% Answering	83%	17%	

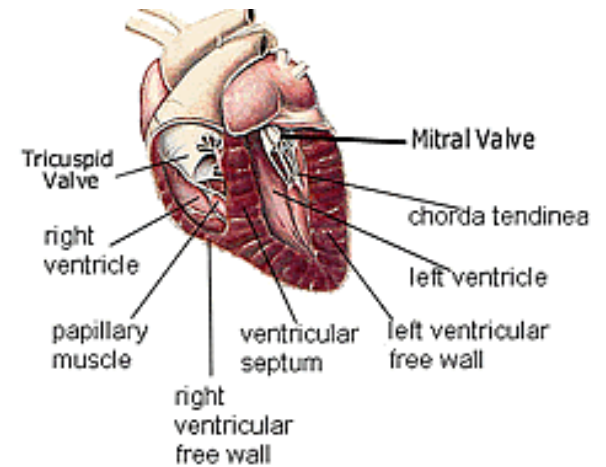


Q 9.2 If yes, Examined by Whom (581 Answered)			
	General Vet	Cardiologist	Non Specified
Number of Dogs	515	66	25
% Answering	89%	11%	

Q 9.3 If yes, Exam Type						
	Stethoscope	EKG	Echocardiogram	Radiograph	Ultrasound	Doppler
Number of Dogs	581	27	33	11	2	1

Heart

Q 9.4 Heart Problems (719 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	45	674	37
% Answering	6%	94%	



Q 9.5 If Yes, Problem Type (Dogs could have more than 1 problem.)		
Problem	Number of Dogs	% of Dogs Examined, Reporting a Heart Problem
Murmur**	37	82%
Dilated cardiomyopathy	1	2%
Hypertrophic cardiomyopathy	0	0%
Restrictive cardiomyopathy	2	4%
Septal defects	0	0%
Aortic stenosis	0	0%
Mitral valve insufficiency	14	31%
Tricuspid valve insufficiency	3	7%
Hypertension	4	9%
Arrhythmia	1	2%
Patent Ductus Arteriosus	1	2%
Other*	6	13%

**Of the 606 dogs examined, 6% were diagnosed with a heart murmur.

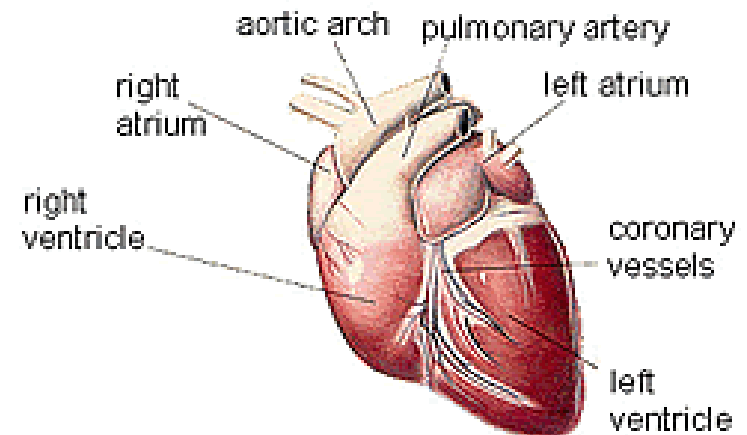
Q 9.5 Heart Problems Other (6 answering)
Pulmonic Stenosis
noisy mitral valve but not leaking-okay
enlarged at 14 yrs
diagnoses @ 13 yrs, fine before
very slight murmur at 3 mos., gone now
systolic murmur /mild pulmonic stenosis

Heart

Q 9.6 Murmur Type		Murmur Grade (37 dogs)						
Type	Number of Dogs	1	2	3	4	5	6	Unknown
Systolic	11		4	5		1		1
Diastolic	1							1
Holosystolic	0							
Machinery	2				1		1	
Loudest on Left	9	1	2	4	1		1	
Loudest on Right	1							
Bilateral	0							
Other*	16	4	1	1	1			8

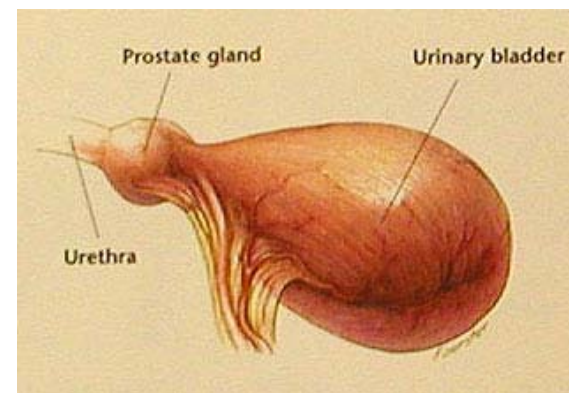
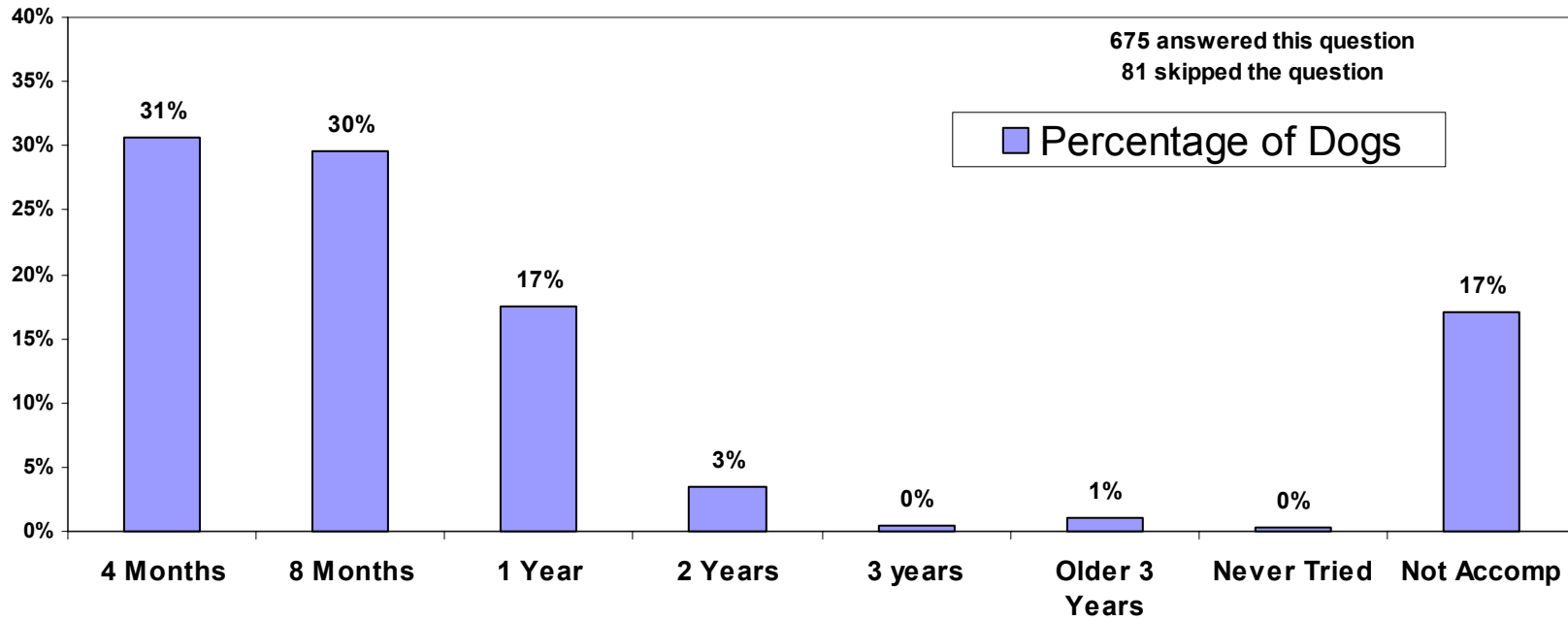
Q 9.6 Murmur Type Other (16 answering)

Count	Heart Problem Murmur Other
6	dont know
1	Don't know - identified today - ultrasound on 6/3/
1	I don't know. Vet said it was minor.
1	I think loudest on the left, but unsure
1	just noisy valve not a real murmur per cardiologist
1	on inspiration only
1	pulmonary stenosis
1	small murmur don't know type
1	some regurgitation from the aortic valve
1	heart problems diagnosed at 13 years fine before
1	mitral valve degeneration



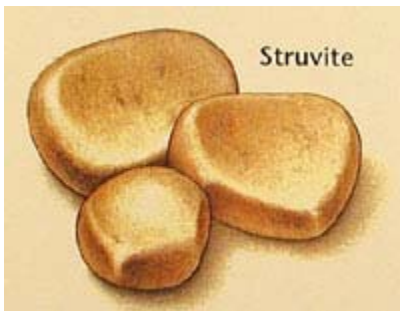
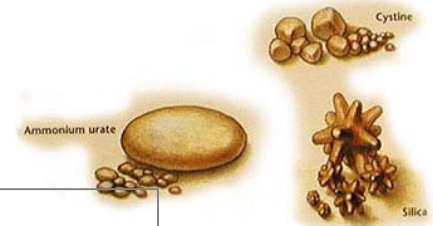
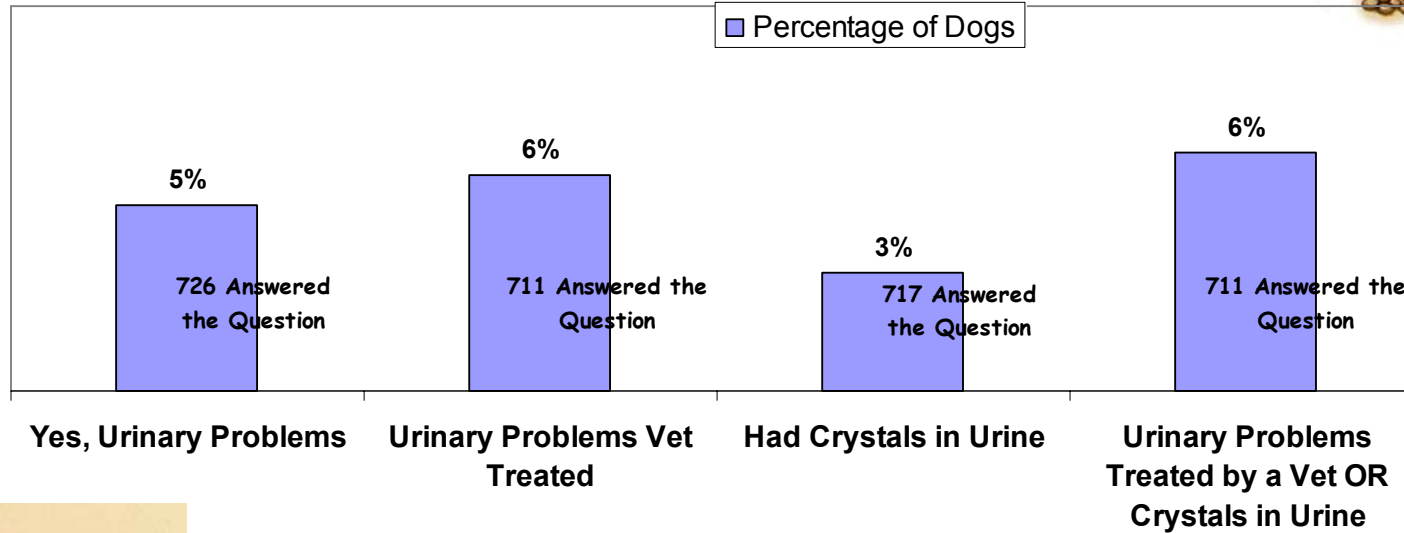
Urinary

Q 10.1 Age Reliably Housebroken

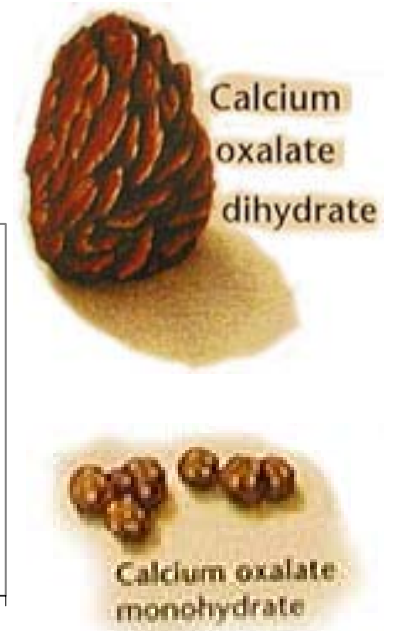
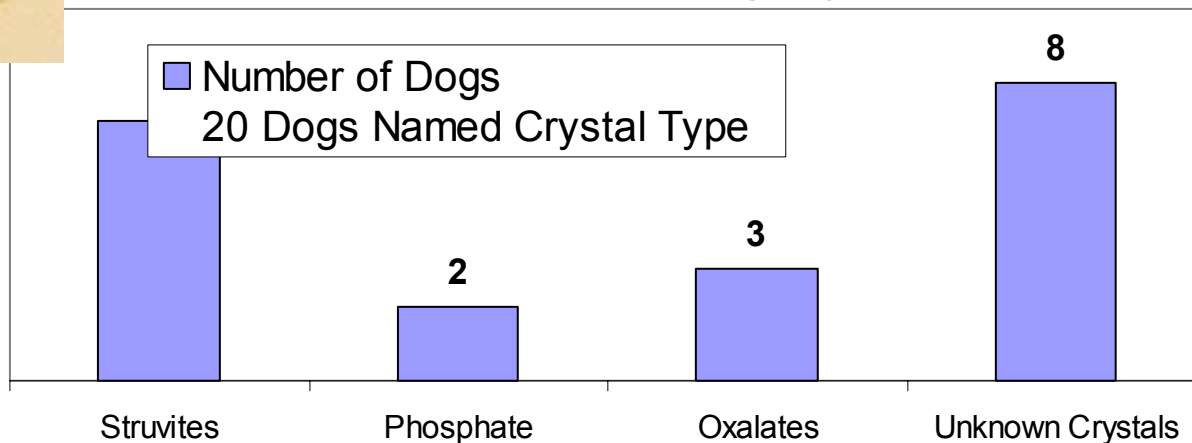


Urinary

Q 10.2, 10.3, 10.4 Number of Dogs with a Urinary Problem

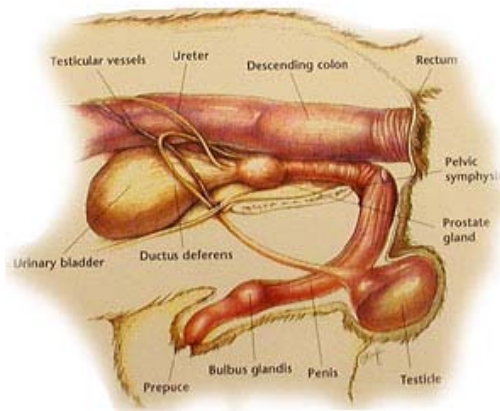
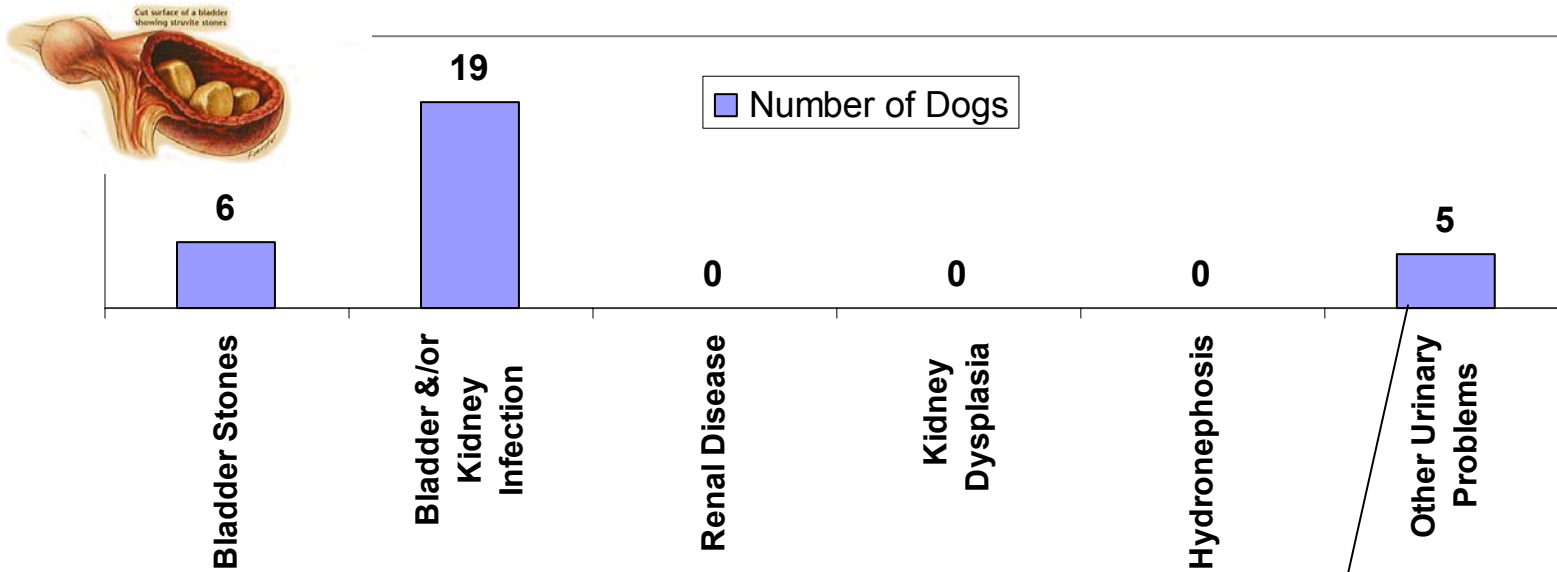


Q 10.5 Kinds of Crystals Found in Urine of Havanese Reporting Crystals



Urinary

Q 10.6 Urinary Problems Diagnosed, Apart From Crystals in Urine (27 answering)



Q 10.5, 10.6 Other Urinary Problems
as puppy only
frequent urination
possible liver/kidney problem
small cyst on kidney which has been ultrasound
testing suspected possible bladder stones to small
from when she was neutered

Reproduction



•Problems

11.1 Male Problems (328 Dogs Answered)		
Problem (dogs could answer more than one question)	Number of Dogs	% of Dogs Answering This Question
No problems	214	65%
Neutered	149	45%
Undescended testicles (both)	3	1%
Undescended right testicle	12	4%
Undescended left testicle	3	1%
Bouncing right testicle	3	1%
Bouncing left testicle	0	0%
Sterility	2	1%
Low sperm count	2	1%
Abnormal or dead sperm	1	0%
Other*	6	2%
Males reporting at least 1 problem	28	9%

***See Appendix H for the participants' comments regarding other problems.**

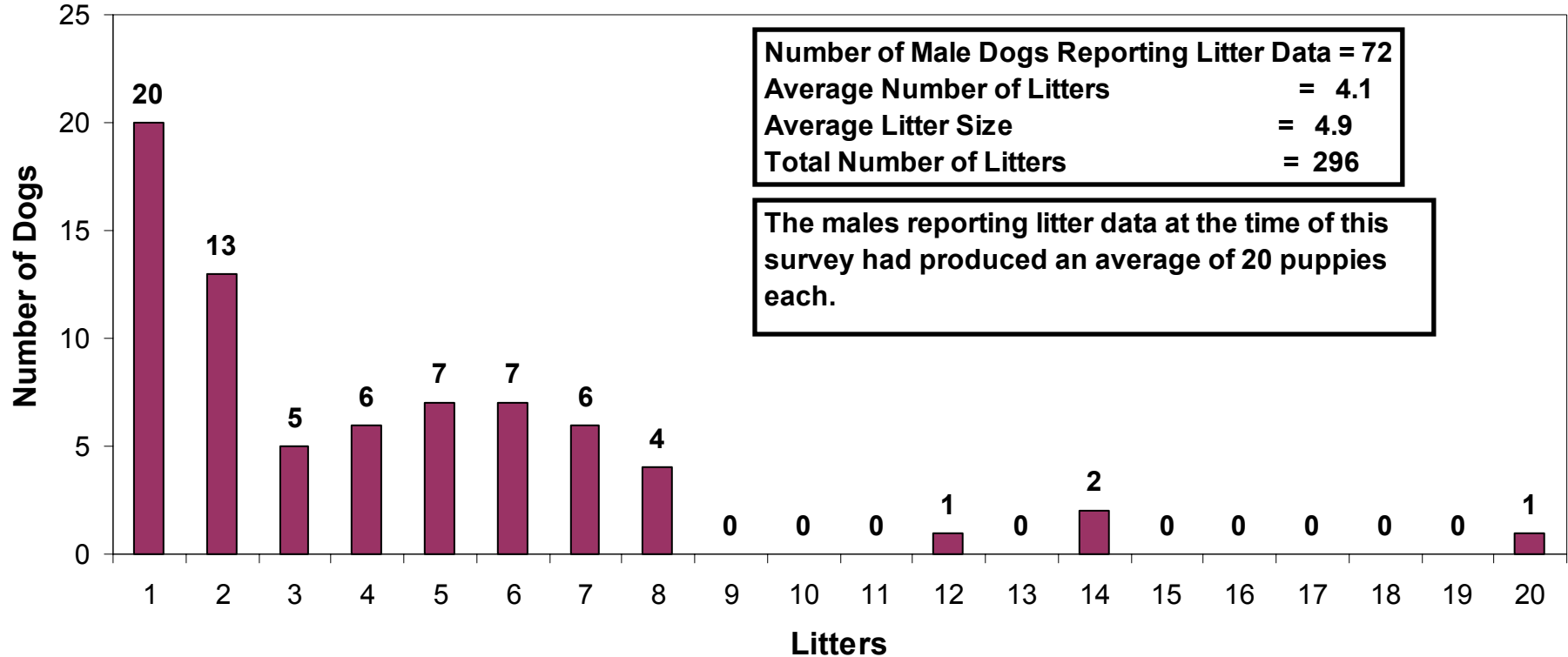
11.2 Female Problems (377 Dogs Answered)		
Delivery problems (dogs could answer more than one question)	Number of Dogs	% of Dogs Answering This Question
No problems	267	71%
Spayed	144	38%
Heat cycle problems	4	1%
Infertility	1	0%
Resorption of puppies	10	3%
Spontaneous abortion	2	1%
Premature litters	2	1%
Delivery problems	20	5%
SIPS (sub-involved placental sites)	1	0%
Eclampsia	5	1%
Retained placenta	2	1%
Uterine infections/pyometra	4	1%
Agalactia (no milk)	1	0%
Other*	21	6%
Females reporting at least 1 problem	50	13%

Reproduction

•Offspring



Q 11.4 Number of Dogs by Number of Litters Males

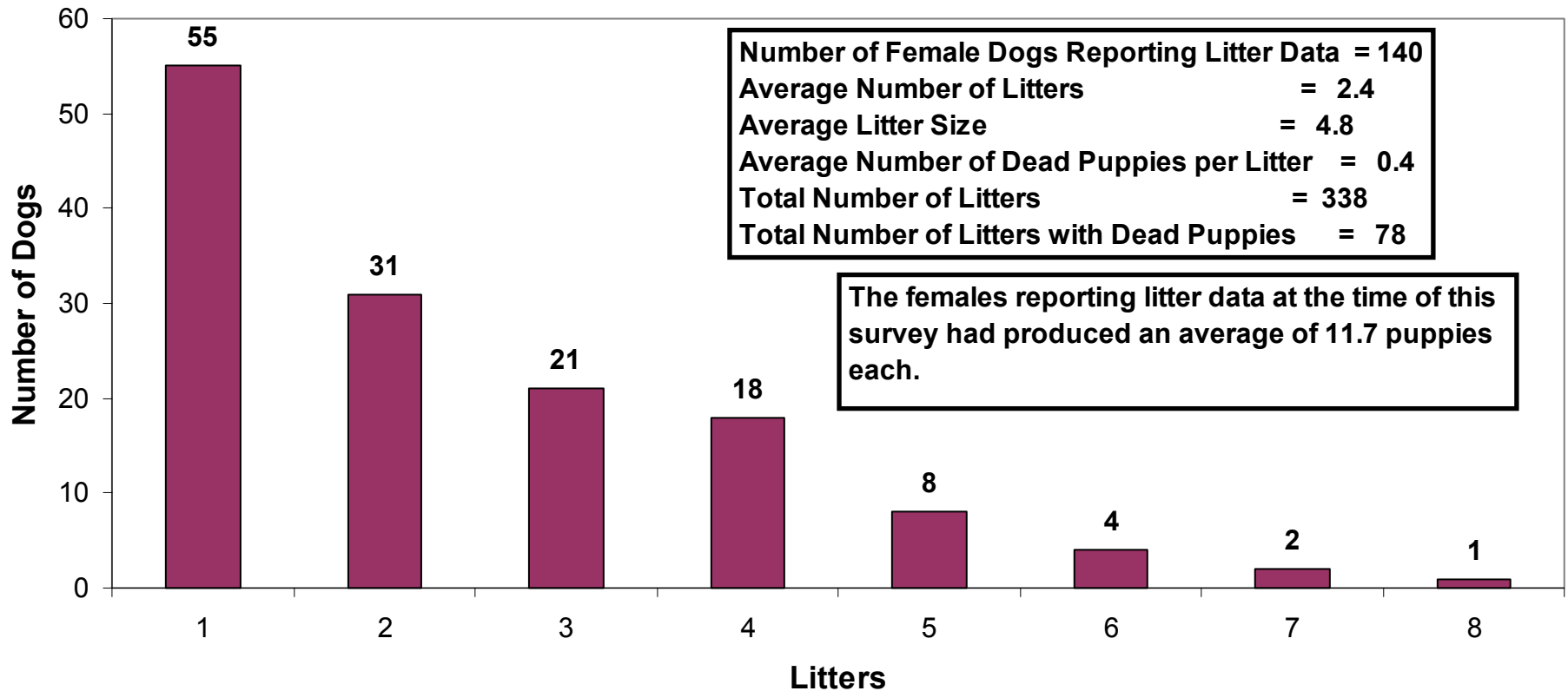


Reproduction

•Offspring



Q 11.7 Number of Dogs By Number of Litters Females



Reproduction

•Offspring

11.3 Produced Offspring? (698 Answered)			
	Yes	No	Didn't Answer
Number of Dogs	225	473	58
% of Dogs Answering the Question	32%	68%	



11.9 BAER Testing Offspring (210 dogs answered)						
	Every Litter	One Litter	No Testing Done	Several Litters	If Several, Range (No. Litters)	If Several, Average Number of Litters Tested
Number of Dogs	65	13	90	20	2 to 8	3.8
% of Dogs Answering the Question	31%	6%	43%	10%		



Reproduction

•Offspring Problems

225 Survey dogs reported producing offspring.

11.10 Problems Occurring in Offspring of Survey Dogs	
Problem	Number of Dogs
Cataracts	5
Deafness	6
Patellar luxation	5
Cleft palate	5
Sebaceous Adenitis (SA)	4
Short Haired Havanese	13
Liver shunts	5
High bile acids	6
Cryptorchidism (undescended testicles)	14
Bouncing testicles	8
LCP (Legg-Calve-Perthes)	7
Missing incisor (s)	25
CD (chondrodysplasia)	24
Asymmetry	24
Syndactyly	2
Growth abnormalities	1
Ocular abnormalities	3

Problem	Number of Dogs
Skull abnormalities	3
Cardiac abnormalities	9
Seizures	4
Hip dysplasia	4
Open fontanel	8
Kidney dysplasia	1
HMVD	0
Abnormal liver size	0
Abnormal adrenal gland size	0
Cushing's disease	1
Chronic diarrhea	2
Retardation	2
Twins	2
Other*	33
Number of dogs reporting at least 1 problem	108 (48% of dogs reporting offspring)

***See Appendix H for Respondents' Comments About "Other" Problems of Offspring**



Reproduction

•Delivery Problems

147 bitches reported having litters of puppies, only 140 reported data on the litters.

11.11 Delivery Problems (412 Females)			
	Yes	No	Didn't Answer
Number of Dogs	38	146	228
% of Females in the Survey	9%	35%	55%

11.13 Females Needing Intervention During Delivery (113 Answered)		
Type	Number of Dogs	% of Dogs Needing Help Received This Type of Intervention
None	62	
Manual assistance	23	43%
Oxytocin given	25	46%
C-section	23	43%
Other*	3	6%
Number of Dogs requiring at least 1 type of intervention	54	100%

11.12 Delivery Problems (Of Those Answering Yes to 11.11)		
Type	Number of Dogs	% of Dogs with a Problem Reported This Type of Problem
Dystocia (difficult delivery)	13	34%
Puppy Stuck	19	50%
Uterine inertia	5	13%
Puppy retained	3	8%
Other*	6	16%
Number of Dogs having at least 1 problem	38	100%

11.14 Number of Litters with Delivery Problems vs. Number of Females Reporting A Delivery Problem (46 answered)			
	1 Litter w/ Delivery Probs	2 Litters w/ Delivery Probs	3 Litters w/ Delivery Probs
Number of Dogs	30	10	6
% of Dogs With This Number of Litters with a Delivery Problem	65%	22%	13%

***See Appendix H for Respondents' Comments on Additional Reproductive Health Information**

Neurological



Q 12.1, 12.2, 12.3 Neurological Problems Reported in the Survey (749 Answered This Question)								
15 Dogs or 2 % With Neurological Problems	Owner Diagnosed	3	General Vet	6	Specialist	6	Null (Not Answered)	0
13 Dogs or 2% Had A Seizure	Owner Diagnosed	1	General Vet	6	Specialist	5	Null (Not Answered)	1

Q 12.4 Number of Havanese Reporting Neurological Problems (15 dogs or 2 % reported one or more problems, 749 answered this question)						
Head Tremors	Obsessive Compulsive	Seizure Once	Seizure Eclampsia	Seizure Recurring	Seizure Grand Mal	Seizure Petite Mal
4	1	1	1	6	3	2

Q 12.5 7 Dogs or 1% Reported A Non-Neurological Seizure (749 Answered This Question)				
Non Neurological Seizure Other	Eclampsia Seizure	Diabetes Seizure	Hypoglycemia	Liver
5	2	0	0	0

* See Appendix I for “Q 12.4 and 12.5 Other Neurological Problems and Seizures” comments entered in the Survey by the participants.

Liver

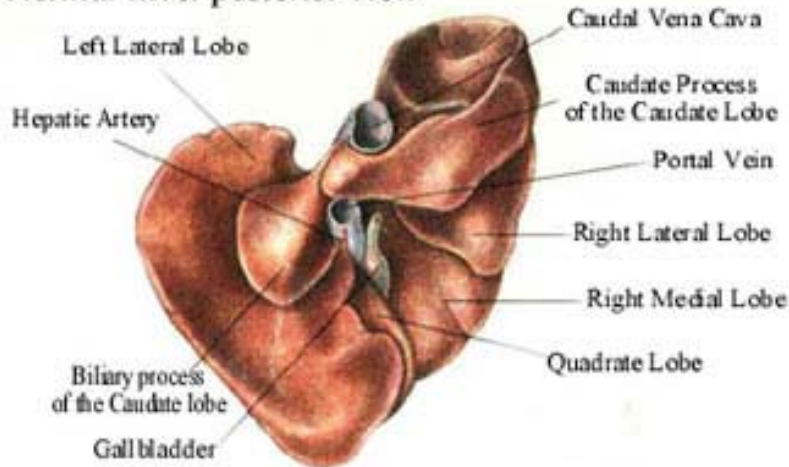
Q 13.1, 13.2, 13.3, 13.4 Liver Problems, Testing and Diagnostician Reported in the Survey (Percentages are based on the number of responses to the question.)

Has This Havanese Ever Been Tested For Liver Function? (726 Answered)	Yes	228	31%	Chemistry Panel (ALT)	167	23%	Paired Bile Acids	129	18%	Other*	36	5%
Has this Havanese Had Liver Problems? (688 Answered)	Yes	22	3%	Diagnosed By Specialist	4	1%	Diagnosed By General Vet	17	2%	Null	1	0%
	No	666	97%	Diagnosed By Specialist	1	0%	Diagnosed By General Vet	1	0%	Owner Diagnosed	2	0%

Q 13.5 Tests Used for Diagnosis of Reported Liver Problem (22 Dogs)*

Ultrasound	Radiograph	Biopsy	Bile Acids
6	4	2	20

Normal Liver posterior view



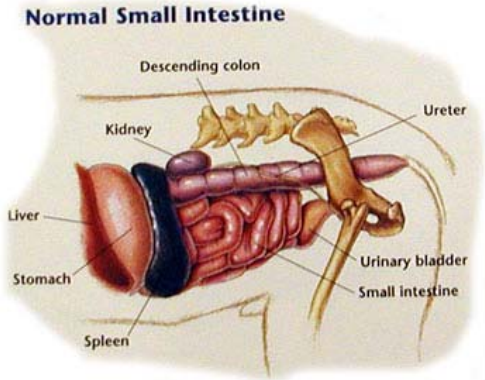
Q 13.6 Reported Diagnosis of the Liver Problem of the Havanese Dogs (22) in the Survey

Single Shunt	Multiple Shunt	HMVD Liver	Biliary Disorders	Abnormal Size	Elevated Bile Acids
1	1	3	2	3	20

No one reported a diagnosis of --- Liver shunt location; Repaired liver shunt; or Cirrhosis.

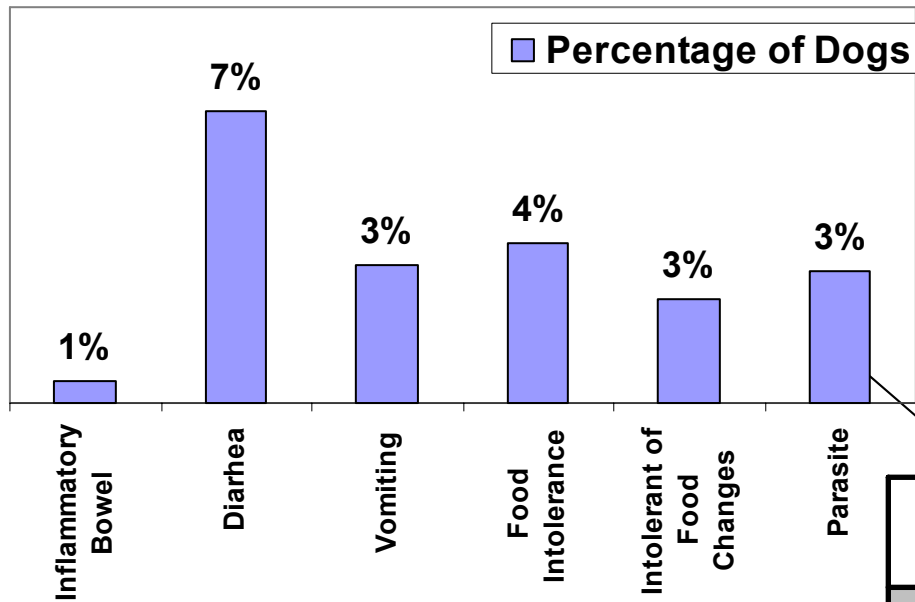
* See Appendix J for “Q 13.5” and “Q 13.7 Bile Acid Levels of the Survey Dogs” entered in the Survey by the participants.

Gastrointestinal



Q 14.1, Q 14.2 Number of Dogs Reporting Gastrointestinal Problems in the Survey						
Gastrointestinal Problems (out of 721 Dogs)	Yes		Specialist Diagnosed	General Vet Diagnosed	Owner Diagnosed	Did Not Answer
	67	9%	5	36	19	7
	No	654	91%	0	1	3

Q 14.3 Gastronintestinal Problems Diagnosed in Surveyed Havanese (721 Answered)



Q 14.3 Other Gastrointestinal Problems	
Gastrointestinal Problems Other	Number
had severe diarrhea from bad food once	1
has improved over last 6 months	1
he had gastro problems for the first 9 mos of puppy	1
ran ALL tests, culture, all neg, responded to	1
treated as a young puppy at the age of 6 weeks	1
Under weight when we got her, much better now	1
undergoing blood testing	1

Q 14.3 Types of Parasite Infections and the Number of Dogs Reporting the Infection				
giardia	coccidia	tapeworm	campylobacter	hookworm
4	8	4	3	1

Endocrine

Q 15.1, 15.2 Endocrine Problems Reported in Dogs in the Survey								
Does This Havanese Have An Endocrine Problem Diagnosed By A Vet? (719 Answered)	No	98% [708]						
	Yes	2% [11]	Hypothyroidism	8	Addisons	1	Compensated autoimmune thyroiditis	2
No one reported a diagnosis of Cushing's or Alopecia.								

Miscellaneous



Q 15.3 Are there any other problems this dog has been diagnosed as having.				
Diabetes	Cancer	Blood Disorders	Immune System Disorders	OTHER , includes greenie bone in throat, hypoglycemia, food poisoning, tonsillitis, severe idiopathic anemia, giardia, benign mammary tumor
0	1	1	2	7
New problems, issues, and important comments that were recorded in the Survey are given in Appendix K.				

Miscellaneous

Health Issues that the Survey Participants Considered Important to the Havanese Breed

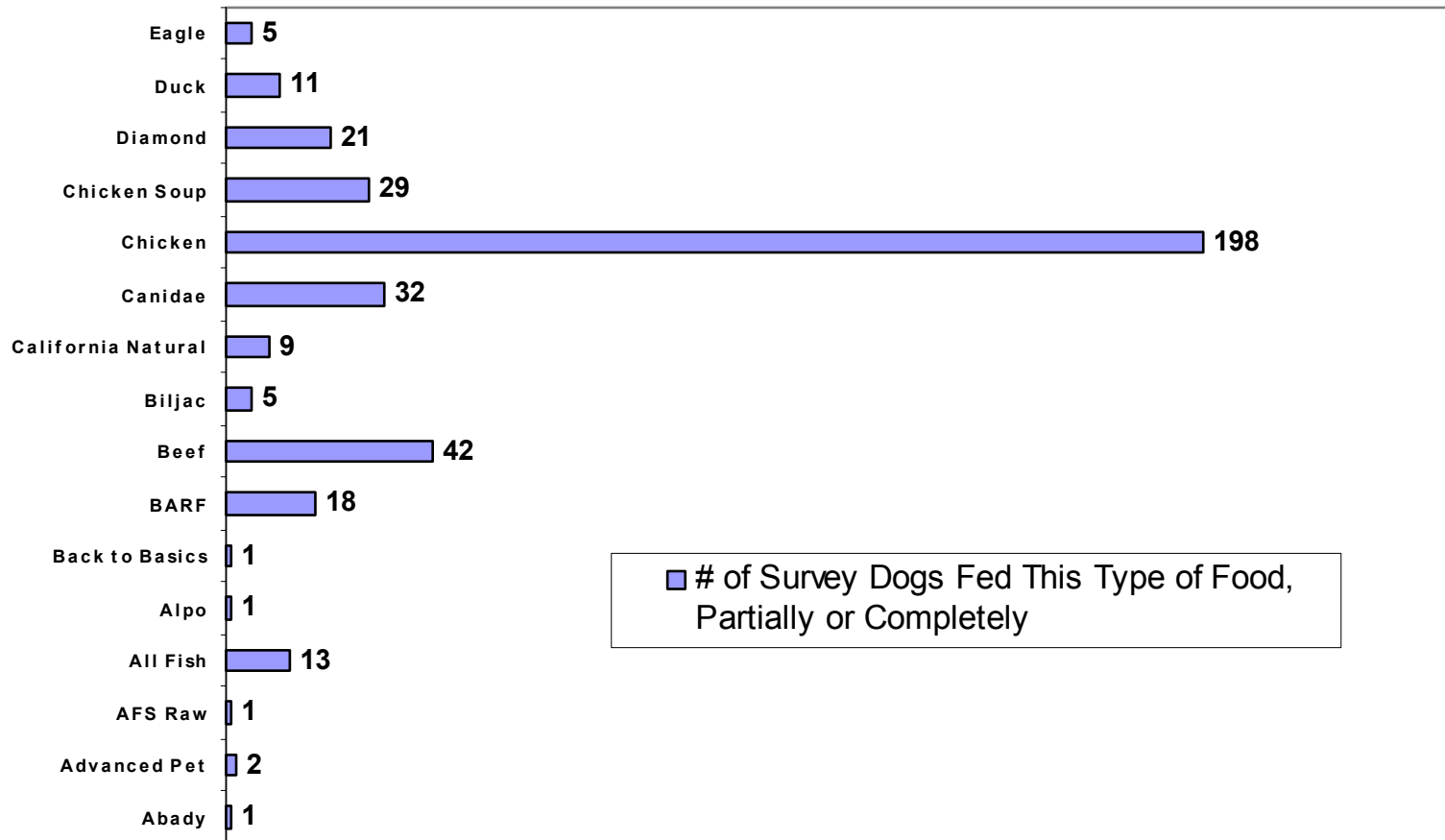
Summary List*:

- High Incidence of retained puppy teeth
- Collapsed trachea
- Drug and anesthesia sensitivity – rabies, vaccinations
- Injected heartworm preventative
- Hiccups
- Unexplained deaths
- Poop eater
- Vomiting, colitis, inflammatory bowel disease, gastroenteritis
- Hop-Skip Disorder. May be neurological, but nothing thus far is conclusive.
- Autoimmune diseases
- Tear stains
- Pigmentation loss on nose
- Anal glands
- Enlarged prostate
- Unusual “lethargy”
- Obsessive/compulsive licking

*A complete listing of comments as entered is given in Appendix K.

Diet

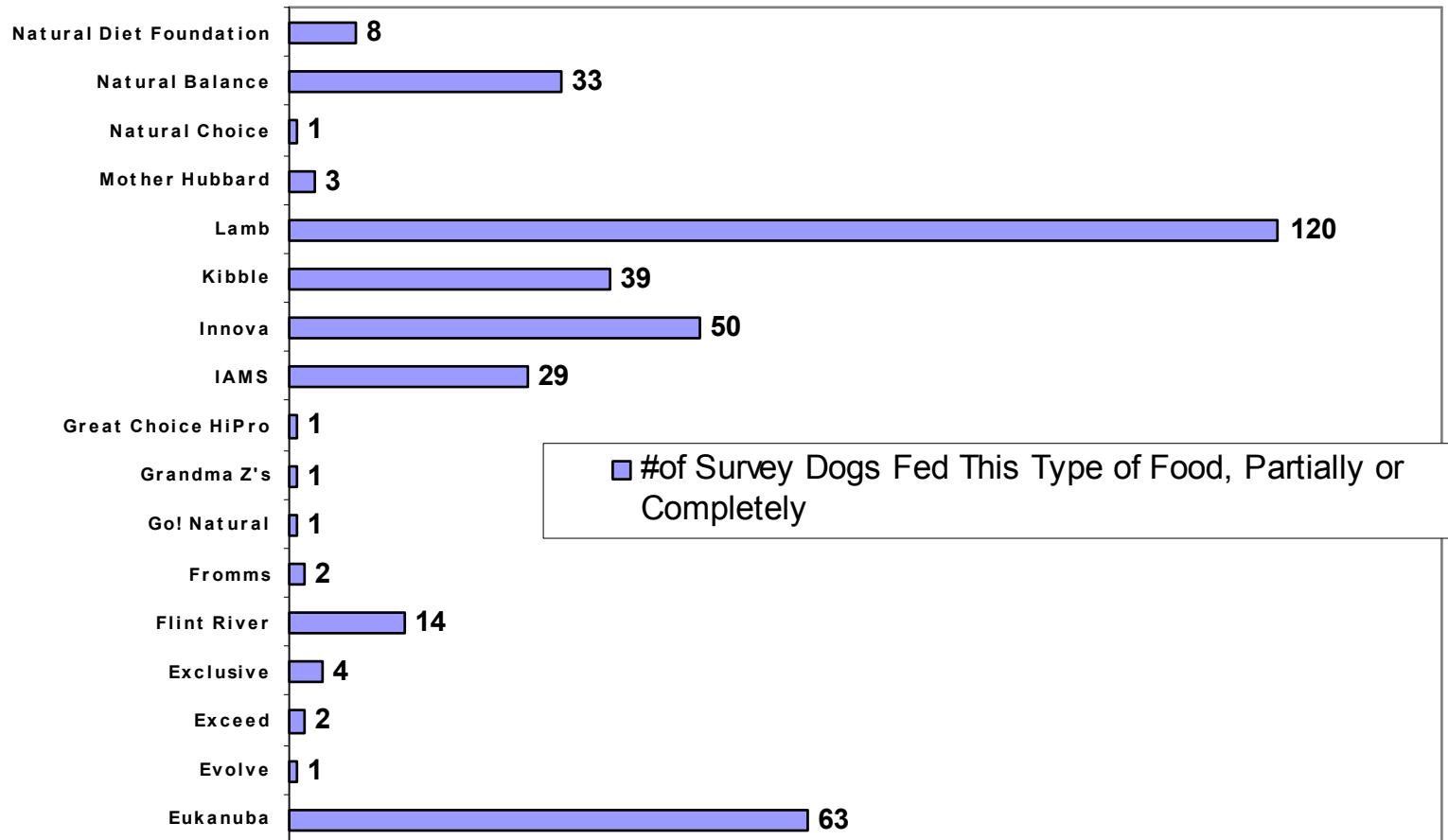
Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely
(714 Answered, Respondents could list more than 1 food)



See Appendix L for a complete listing of the diet that survey participants described.

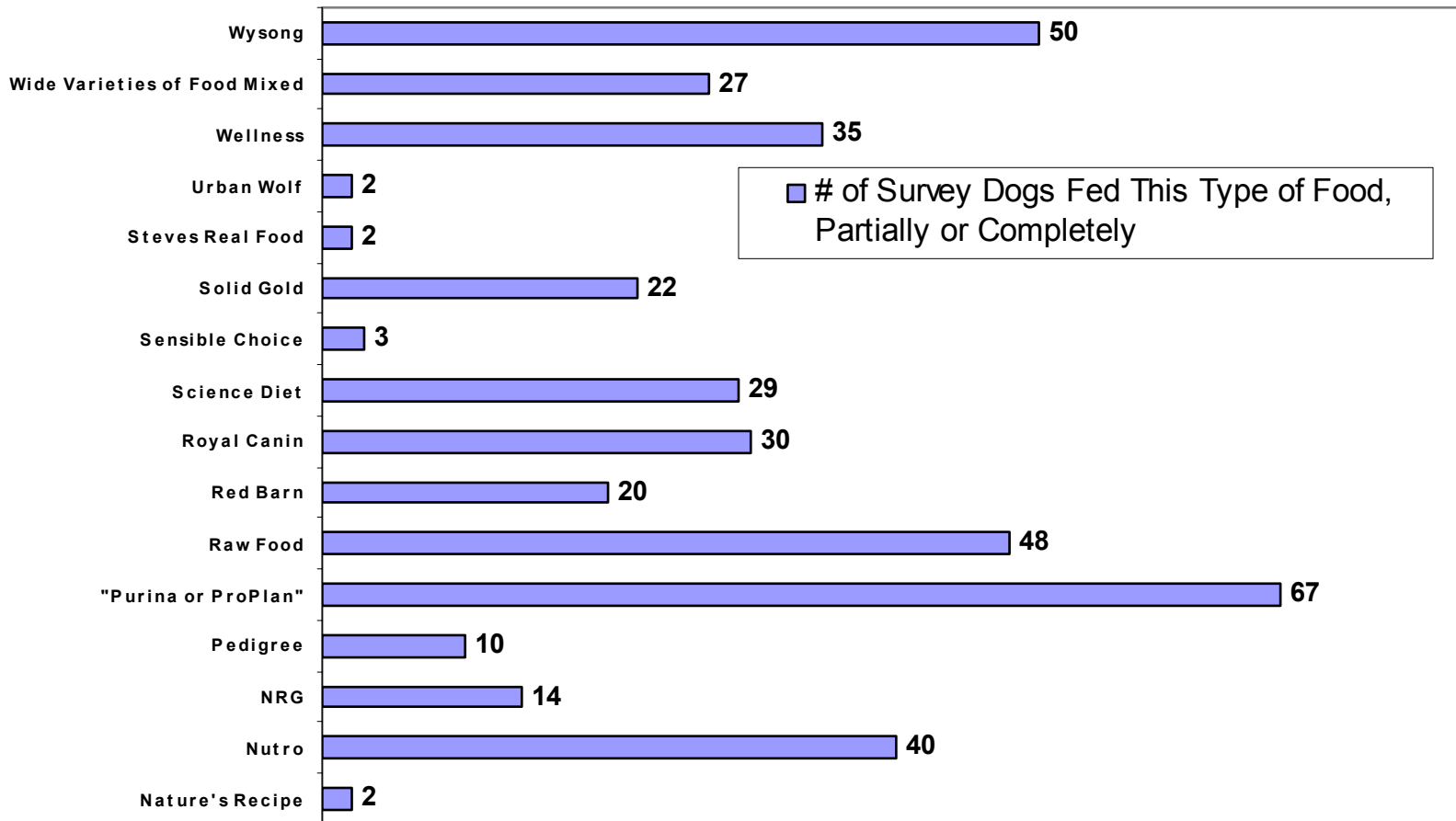
Diet

Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely
(714 Answered, Respondents could list more than 1 food)



Diet

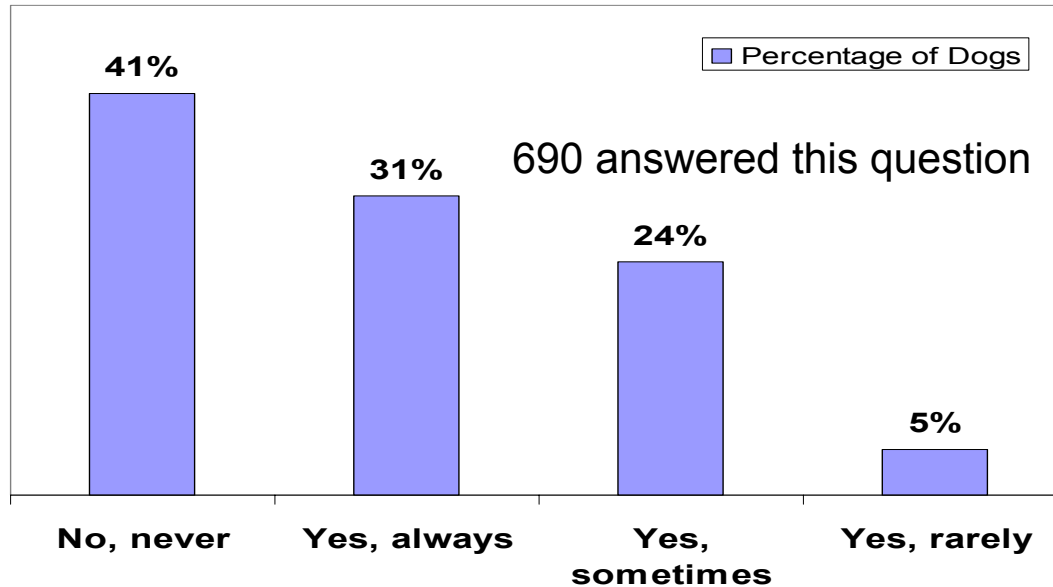
Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely (714 Answered, Respondents could list more than 1 food)



See Appendix L for a complete listing of the diet that survey participants described.

Diet

Q 16.2 Do You Supplement this Dog's Food?

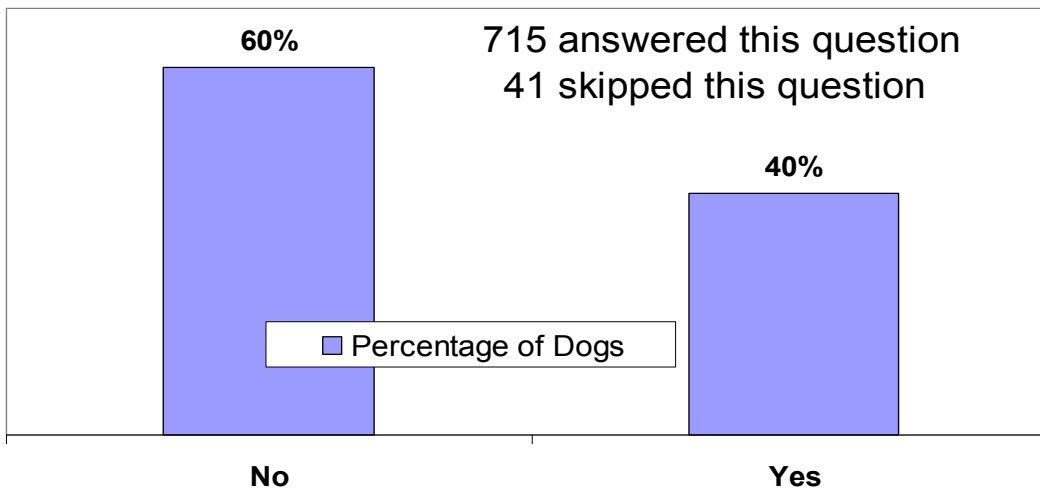


42% of the dogs surveyed never supplemented the dog's diet.

40% of the dogs surveyed supplemented their diet with egg each day.



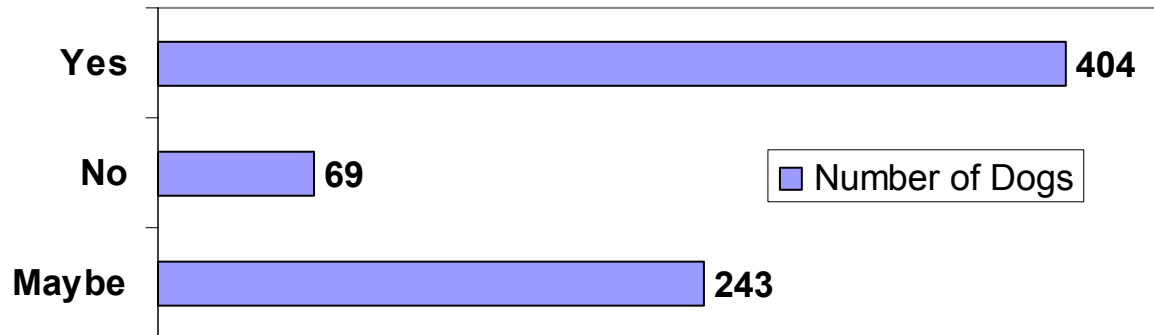
Q 16.3 Dog's Diet Supplimented with at Least 1/2 Egg per Day



See Appendix L for a complete listing of the diet that survey participants described.

Study support

Q 17.1 Willingness to Contribute to a Non-Anonymous Havanese Data Bank



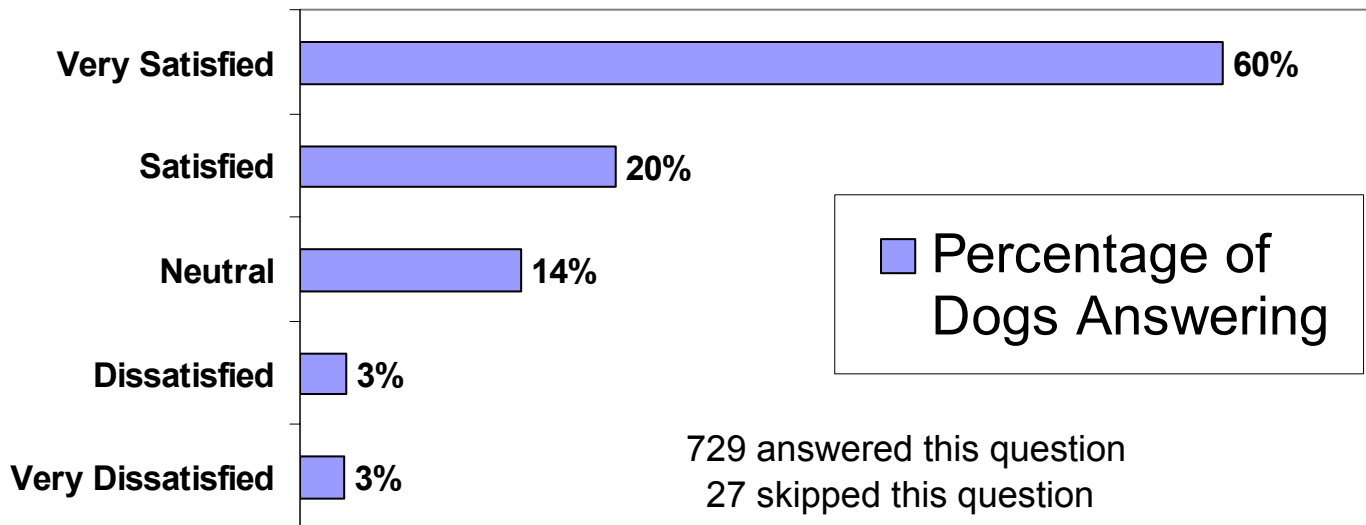
716 answered this question
40 skipped this question

647 dogs or 90% of the respondents answering this question might be available to contribute to a non-anonymous data bank.



Satisfaction

Q 18.1 Are You Satisfied that You Gave HCA Useful Health Information About Your Havanese Dog?



80%	Satisfied or Very Satisfied
14%	Neutral
6%	Dissatisfied or Very Dissatisfied

Data Collection Overview

After the multiple data files were received from the SurveySuite tool, combined together and loaded into Microsoft Access there were a total of 765 records in the database. Each record was comprised of 701 fields or columns. The data files originally came with 699 fields. To facilitate data analysis, the “Age Decimal Years” field was added to combine the “Age Years” and “Age Months” fields and the “Height” field was added to combine the “Height Inches” and “Height Fraction” fields.

An initial analysis of the data showed that there were five records with all fields blank, three records with data in one field only, and one record with data in two fields. These nine records were immediately identified as invalid records. The number of non-blank fields in the remaining 756 records ranged from a low of 12 to a high of 190. The average number of non-blank fields was 130.8 with a standard deviation of 24.9. See figure 1 for a distribution of non-blank fields.

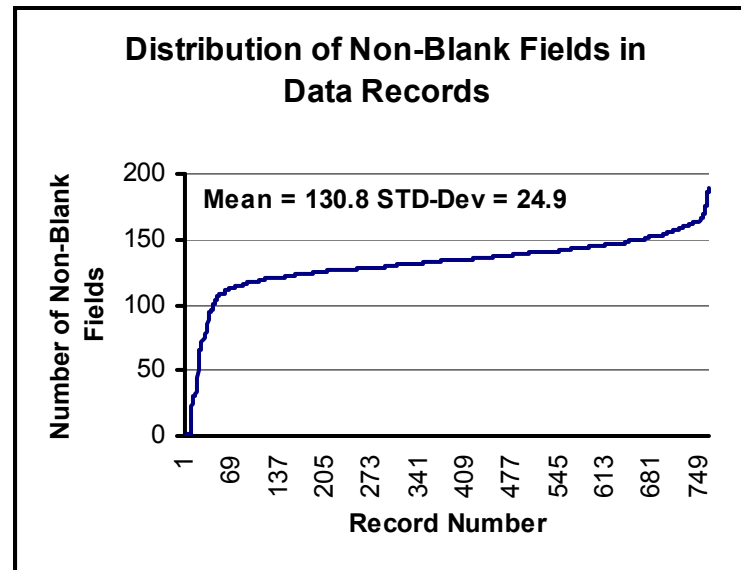


Figure 1. Distribution of Non-Blank Fields in Data Records

Data Collection Overview, continued

A sampling of the records in the lower and upper tails, particularly the records containing from 12 to 36 non-blank fields, showed that the remaining 756 records to be consistent with valid entries. It was concluded that 756 would be the number of dogs present in this survey. To further check the reasonableness of the data, fields containing information about height, weight, age, number of litters, number of puppies per litter, and vaccinations were examined to see if their maximum, minimum, mean, and standard deviation values were within expected bounds. All fields checked were within expected bounds.

Additional checks of the data records showed a number of data entry errors. In some cases respondents enter “six” instead of “6” in a number field. There were approximately 10 instances of these kinds of errors. As it was obvious what the respondent intended, these types of errors were corrected. In cases where the errors were not obvious, no attempts to correct these errors were made. Records with uncorrected errors did not get included in later data analysis because the error was caught by the selection criteria and the record was excluded.

Consistency checks were performed throughout the data analysis phase. As an example, in response to the question, “Has this Havanese produced offspring?”, there were 225 “yes”s, 473 “no”s, and 58 “blank” answers. Of the 225 “yes” answers, 77 were male dogs, 147 were female, and 1 didn’t specify the sex of the dog. Comparing the 77 male dogs with the litter data for males showed that only 72 dogs actually had data about the litters. In this example, “72”, instead of “77”, was used as the base for calculating averages. It was also observed that there were records that contained litter data consistent with the dog being female and the “sex” field was blank. A record of this sort was excluded from further litter data analysis.

After many hours of data analysis and numerous consistency checks, it is the opinion of the data analysis team that the survey respondents were honest and that the data they provided is consistent with the respondents best effort to accurately represent their dogs.

Survey Tools

Using the SurveySuite Online Service as a Tool for Our Survey

A brief description of SurveySuite is that it is an unsupported survey service available on the internet for a yearly fee of \$69.95 per year. For this fee you can

- Do as many surveys as you wish in the year.
- Ask 15 types of questions on your survey.
- Edit and preview your survey before publishing it to the web.
- Download the responses to your survey to your own computer in the form of all questions, a tally, and a total.
- Reset the survey, erasing all previous answers to the survey.
- Download your questions, tally, and total onto an Excel spreadsheet.

Because this was our first experience with a club written survey and our first experience with the service, SurveySuite, we were presented two unanticipated challenges. First, we knew the survey was long, but we didn't anticipate its width across an Excel spreadsheet. Its questions and answers generated 699 columns across a spreadsheet. Excel and Access accept only 255 columns.

Survey Tools

Using the SurveySuite Online Service as a Tool for Our Survey, continued

So, the data was broken into three parts. On the spreadsheet table, imagine looking at a large, wide table from left to right and then separating the table into 3 sections so that the three sections can go into three worksheets in an Excel workbook.

Secondly, so many people took the survey that the answers required downloading four separate times resulting in four 'chunks' of data. In this case, on the spreadsheet table, imagine looking at a long table from top to bottom and then separating it from top to bottom into 4 sections because your computer only receives files of a smallish size from the computer at SurveySuite. To get a feeling for this, imagine that there is a ferry running between SurveySuite and your home. The ferry can only hold a few cars, so you must unload four ferries to get your full fleet of cars, or in our survey's situation, our full 'fleet' of responses.

Combining these 'chunks' of data and maintaining the proper alignment of the fields was the first task of the data analysis. The process steps that were used for maintaining the proper alignment of the fields can be provided upon request should data technology specialists be interested.