GREAT DANE CLUB OF AMERICA
National Health Survey

By Margaret R. Slater, DVM, PhD
With invaluable assistance from:
Jacque Harbison, MS &
Norma de Anda

Mary Anne Zanetos (Contact person regarding this GDCA Survey)
Chairman, GDCA Health Survey Committee
MAZ850@aol.com (614) 451-2297

INTRODUCTION

In 1999, The Great Dane Club of America (GDCA) circulated a Request for Proposals for a breed health survey. We (at Texas A&M University) were notified in October 1999 that our proposal was selected and we would be working with the club. The purpose of the survey was to accurately determine the prevalence of specific health problems and identify health and welfare issues of greatest concern to the breed. Survey results could then be used to guide the activities of the GDCA Health and Welfare Committee and to target research funds toward programs which have the best chance for improving the health and quality of life of Great Danes. In order to assure confidentiality, surveys were distributed, collected and analyzed by myself and research assistants at Texas A&M University College of Veterinary Medicine.

The survey was developed with extensive input from the GDCA, especially Mary Anne Zanetos, between April 2000 and September 2001. The survey consisted of two parts. Part 1 was intended to obtain information on how owners feed, care for and enjoy activities with the Great Danes living in their household. Also included were detailed questions on veterinary and husbandry practices such as feeding, preventive care, health screening and perceptions regarding the overall health of Great Danes vs. Great Danes in the respondents' household. Part 2 consisted of a very detailed health history that was to be completed for individual Great Danes who were currently living in the owner's household at the time of survey and who died while living in the household in the past five years. These dogs are defined as "eligible dogs" for the survey. Respondents were asked to include all eligible dogs in Part 2.

SURVEY ADMINISTRATION

The survey was sent to three targeted groups: 1) GDCA; 2) Affiliate Clubs and 3) a random sample of AKC registered dog owners. Surveys were coded for tracking response rates and mailed individually to all GDCA member households, along with pre-paid envelopes for returning the survey in December 2001. These surveys were confidential since my laboratory maintained a list of respondents. Reminder post cards were sent to non-responders in April 2002. After discussion, the club decided not to pursue additional individual reminders. Surveys were also available for all GDCA and Affiliate club members at the National meeting in October 2002.

Members of affiliate Great Dane clubs received surveys through their club secretaries who were sent packets of surveys and instructions so that affiliate clubs could hold programs to present the survey and encourage participation. The surveys were coded so that we could tell they were from Affiliate clubs, but the responses were anonymous since there was no list to match between the name/address and the code. The initial mailing was in October 2001. Club secretaries were sent reminders in March 2002 for announcing in the April meetings. Several new clubs responded to the request for participation in April 2002. A letter was mailed to all Club Presidents and Secretaries in the fall of 2002. A final notice was published in the GDCA

Bulletin in January of 2003. A few more requests for surveys were received as a result in March 2003.

Surveys and prepaid return envelopes were mailed to a random sample of 2000 owners of AKC registered Great Danes in March 2002. This group was based on registrations issued from 1992 to 1997. While these surveys had a code number for tracking response rates, only Furst Direct, working with the AKC, had the list. After initially planning to provide a reminder postcard, the club decided to redirect the resources toward pursuing Affiliate member responses.

SURVEY RESULTS

Preliminary survey results were reported at the GDCA National Specialty Show in 2002. At that time it was decided to continue to encourage participation and extend the period for data collection through June 2003.

A total of 519 households and 1565 individual Great Danes are included in the final tabulations. Complete results will be reported on the GDCA website (www.gdca.org). Excerpts and special topics from the survey will be published in Dane World Magazine in 2004.

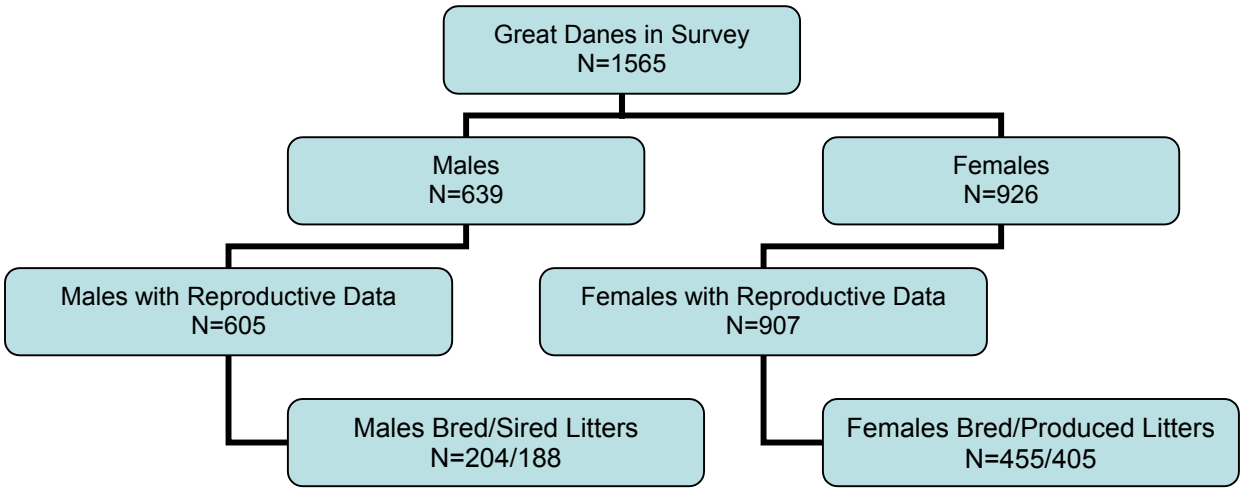

Diagram Showing Great Danes Included in Survey, by Sex and Reproductive Status.

Responses were summarized by means (the average) and medians (the middle number in the group of responses), minimums and maximums for continuous variables such as age and number of litters. For categorical variables, like the disease presence or absence, the total number and percentages were used.

Some data were compared using statistical tests. Because some of the data were not normally distributed, non-parametric statistical tests were used for continuous variables (for age compared to respondent group, Kruskal-Wallis ANOVA was used). For variables that were categorical, such as respondent group and presence or absence of a health problem, the chi-square test was used. A p-value less than 0.05 was considered to be statistically significant.

PART 1: Demographics, Husbandry and Veterinary Practices

Table 1: Summary of Survey Returns and Response Rates

Respondent Group	Surveys Mailed	Valid Address	Surveys Returned	Response Rate
Affiliate Club Members[(a)]	1025	1025	226	22%
GDCA Members[(b)]	592	580	149	26%
AKC Random Sample[(c)]	2000	1999	144	7%
Total [(d)]	3617	3604	519	14%
Respondent Group	**Number of Great Danes**	**Percentage of Great Danes in Survey**		
Affiliate Club Members	676	43%		
GDCA Members	513	33%		
AKC Random Sample	376	24%		
Total	1565	100%		

[(a)] Affiliate club members' surveys were distributed through their club secretary in order to maintain anonymity of distribution and returns. Households with no Great Danes in residence within the past 5 years were eliminated, prior to distribution and are not counted in the number of surveys mailed. Club secretaries used their discretion as to how to distribute to their members. Surveys were handed out at meetings, mailed to absent members and in some cases were mailed to the entire club.

[(b)] Survey forms were mailed by an outside contractor, Dr. Margaret Slater, Texas A&M University, to GDCA member households based on the 2002 GDCA membership roster. One survey was mailed per household regardless of how many members resided there. Surveys with invalid addresses were not included in response rates.

[(c)] AKC sample was selected and mailed by an outside contractor, Furst Direct. Households were randomly selected based on AKC registration of a Great Dane during the 1992-97. Household addresses on the mailing list were verified, prior to mailing, by the US Postal Service.

[(d)] In case multiple surveys were received, respondents were asked to return surveys in the following order of preference: GDCA, affiliate, AKC. For example, a GDCA member who received a survey as part of the AKC sample would fill out and return their GDCA survey. The AKC survey would be returned blank with a notation that the respondent had returned a survey as a GDCA member. To avoid duplicate individual dog data, dogs with multiple owners were to be reported on by the custodial owner only. For GDCA and AKC samples, owners who did not have any eligible dogs were included in the list as mailed and received but not in any further tabulations.

Table 2: Summary of Dog Ownership Patterns

	Minimum Dogs per Household[a]	Maximum Dogs per Household[a]	Mean Number of Dogs per Household	Median Number of Dogs per Household	Statistical Significance[b]
Respondent Group					
Affiliate Club Members	0	12	3.0	2	
GDCA Members	0	24	3.4	3	
AKC Random Sample	0	14	2.6	2	AKC fewer dogs/household than GDCA
Total	0	24	3.0	2	P<0.001
	Minimum Length of Dane Ownership (years)	**Maximum Length of Ownership (years)**	**Mean Length of Ownership (years)**	**Median Length of Ownership (years)**	
Respondent Group					
Affiliate Club Members	0.8	53	16	14	Affiliate households owned Danes shorter time than either AKC or GDCA households
GDCA Members	2	54	22	22	
AKC Random Sample	1	50	20	20	
Total	0.8	54	19	19	P<0.001

[a] Includes both adult Great Danes and puppies. There were 12 households with no currently owned dogs but which had eligible dogs that died during the study period.

[b] Kruskal-Wallis non-parametric ANOVA was used to compare these variables

Table 3: Great Dane Involvement and Activities (519 Survey Households)

Types of Dog Involvement	Pet Owner	Breeder	Exhibitor	Comment
519 households	198 (38%)	243 (47%)	332 (64%)	Could choose >1 category
	Rescue	Trainer	Other	
	75 (14%)	44 (8%)	132 (25%)	Could choose >1 category
Involvement in Performance Events	**Obedience**	**Agility**	**Other**	**Any Performance Event**
519 Households	102 (20%)	35 (7%)	41 (8%)	129 (25%)
Living Conditions of Dogs	**In Family Home**	**In Separate Kennel[(a)]**	**Combination**	**Missing**
519 Households	401 (77%)	14 (3%)	100 (19%)	4 (1%)

[(a)] Comment: Significantly fewer households in AKC sample reported housing Great Danes in family home ($p<0.001$). A chi-square test was used for this analysis.

Involvement and Performance[(a)]	AKC Sample n=144	Percent Yes	Affiliate Club Members n=226	Percent Yes	GDCA Members n=149	Percent Yes	Total Yes	P-values
Pet owner	90	63	84	38	24	16	198	<0.0001
Breeder	53	37	97	43	93	62	242	<0.0001
Exhibitor	45	31	160	71	127	85	332	<0.0001
Rescue	13	9	35	16	27	18	75	0.07
Trainer	8	6	21	7	15	14	44	0.01
Other	23	16	56	25	53	36	132	0.0006
Obedience	19	13	46	20	37	25	102	0.04
Agility	6	4	19	8	10	7	35	0.3
Any Performance Event	20	14	53	24	41	28	114	0.01

Table 4: Great Dane Involvement and Performance Activities, by Respondent Group

[(a)] Respondents could select more than one category.

The AKC sample had significantly fewer breeders, exhibitors, obedience or any performance event. GDCA had a lower percentage of pet owners than the other groups.

Table 5: Feeding Practices and Product Use (519 Survey Households)

Types of Dog Food Used	**Dry Kibble[a]**	**Canned**	**Frozen[b]**	**Raw or BARF**	**Other [c]**
(could answer more than one)	485 (93%)	204 (39%)	55 (11%)	64 (12%)	80 (15%)
	Yes [d]	**No or Not Applicable**			
Uses Same Adult Food for Puppies	308 (59%)	211 (41%)			
Feeding Schedule	**Dogs Fed at Set Times**	**Food Available at All Times**	**Missing/No Answer**		
	454 (88%)	58 (11%)	7 (1%)		
	Yes	**No**			
Use of Most Common Nutritional Supplements[e]	299 (58%)	220 (42%)			
Vitamin C	175 (34%)				
Vitamin E	62 (12%)				
Glucosamine	47 (9%)				
Fish Oil	25 (5%)				
Chondroitin	23 (4%)				

[a] Top five dry kibble products, by number of households using: (#1) Purina Pro Plan: 57; (#2) Eagle: 53; (#3) Eukanuba: 48; (#4) Iams: 42; and (#5) Nutro: 40.

[b] Frozen Food Brands, by number of households using: (#1) Bil-Jac: 25; (#2) Steve's Real Food: 4; (#3) Abady: 3.

[c] Other includes various homemade diets other than Raw/BARF. Some included raw meat items, but owners did not select the Raw/BARF category. See Table A2 in Appendix for a detailed list.

[d] Top five brands of puppy food, in order of frequency: (#1) Purina; (#2) Iams; (#3) Eukanuba; (#4) Eagle; (#5) Science Diet. See Table A2 in Appendix for a detailed listing.

[e] See Table A3 in the Appendix for a complete listing.

Table 6: Use of Nutritional Supplements, by Respondent Group

Supplement	AKC Sample	%	Affiliate Club Members	%	GDCA Members	%	Total	%	p-value
	N=144		N=226		N=149		N=519		
Vitamin C	25	17%	97	43%	54	36%	176	34%	<0.0001[a]
Vitamin E	10	7%	32	14%	17	11%	59	11%	0.13
B complex	2	1%	8	4%	3	2%	13	3%	0.34
MSM	3	2%	19	8%	8	5%	30	6%	0.04[b]
Flaxseed Meal	3	2%	8	4%	2	1%	13	3%	0.34
Probiotics	0	0%	8	4%	8	5%	16	3%	0.02[c]
Digestive Enzymes	2	1%	12	5%	10	7%	24	5%	0.08
Glucosamine	5	3%	23	10%	18	12%	46	9%	0.02[d]
Fish Oil	4	3%	15	7%	6	4%	25	5%	0.2
Chondroitin	2	1%	20	9%	10	7%	32	6%	0.01[e]

(a) **Affiliate club and GDCA members were far more likely to use Vitamin C** than were the AKC sample households. This difference was highly significant statistically (p<0.0001).

(b) **Affiliate club and GDCA members were more likely to use MSM** than were the AKC sample households. This difference is less marked than for Vitamin C, with 8% and 5% vs. 2%, of households, respectively, giving Great Danes Vitamin C. This difference was significant statistically (p=0.04).

(c) **Affiliate club and GDCA members were more likely to use Probiotics** than were the AKC sample households. None of the AKC households used probiotics vs. 4% and 5% of Affiliate and GDCA households, respectively. This difference was significant statistically (p=0.02).

(d) **Affiliate club and GDCA members were far more likely to use Glucosamine** than were the AKC sample households. 10% and 12% of Affiliate and GDCA club households, respectively, used this joint health supplement vs. 3% of the AKC households. This difference was significant statistically (p=0.02).

(e) **Affiliate club and GDCA members were far more likely to use Chondroitin** than were the AKC sample households. Only 1% of the AKC household reported using the joint supplement, chondroitin, vs. 9% and 7%, of Affiliate and GDCA households, respectively. This difference which was significant statistically (p=0.01).

Overall, GDCA and Affiliate Club members tended to give their dogs more supplements than AKC respondents. See Table A3 in the Appendix for a complete list of all supplements.

Table 7: Vaccination Attitudes and Practices

	Number (%) of Responses	**Number (%) of Responses**	**Number (%) of Responses**		
	Yes	No	No Answer/Not Applicable	Total	
Do You Vaccinate Your Dogs?	434[(a)] (84%)	64 (12%)	21 (4%)	519 (100%)	
		60 then provided some vaccination information	13 then provided some vaccination information		
	AND of the above respondents, who give non-rabies vaccines:				
Vet Administers Vaccines Sometimes/Always	404 (93%)				
Owner Administers Vaccines Sometimes/Always	207 (48%)				
	Never	Sometimes	Always	Always/Sometimes(a)	Missing
Veterinarian administers?	40	194	267	461	18
Respondent administers?	253	150	99	249	17
Vaccinations (other than rabies) given to Puppies by 16 weeks:	**Number**	**Percent**			
None	20	4%			
1	14	3%			
2	59	11%			
3	164	32%			
4	121	23%			
5	38	7%			
More than 5	29	6%			
No Answer/Not Applicable	74	14%			
Total	519	100%			

Table 7 (cont'd)

Frequency of Adult Booster Shots (other than rabies)	**Number**	**Percent**	**Parvo as a Separate Vaccination?**	269 yes 62% (of 434)
None	64	12%		
Once a Year	275	54%		
Once Every 1-2 Years	111	21%		
Other	48	9%		
No Answer/Not Applicable	21	4%		
Total	519	100%		
Type of Vaccine	**Modified Live**	**Killed**	**Both**	**No Information**
	108	85	192	49

Table 7 (Cont'd).

Frequency of Rabies Vaccination	**Number**	**Percent**
None/Not at All	37	7%
Once a Year	158	30%
Once Every 2 Years	71	14%
Once Every 3 Years	227	44%
Other	12	2%
No Answer/Not Applicable	14	3%
Total	519	100%

(a) 434 indicated that they gave booster vaccinations at all. 461 respondents provided answers to the questions about whether they or the veterinarian vaccinates the dogs. The difference is partly due to respondents giving a single vaccination to a puppy.

The finding that 12% of the respondents report not vaccinating at all demonstrates the impact of the anti-vaccine movement, even among relatively experienced dog owners. However, a small but noticeable percentage of households take the other extreme. They are giving puppies booster vaccinations every 2-3 weeks of their lives until they are 4 months old. There is no scientific evidence to support that using vaccines more often than label recommendations is protective. And recent vaccination discussion might suggest that overly frequent boosters could be harmful.

The frequency of rabies vaccinations is regulated by the state for the majority of locations in the US. And most states use a three year vaccine after the initial one year booster.

Table 8: Use of Preventive Products and Services

	Users (of 519)	Users (of 519)	Users (of 519)	
Monthly Heartworm Products (Heartgard,etc.)	**Flea Preventive Products (e.g. Frontline, etc.)**	**Both Heartworm and Flea Preventive**	**Neither Product**	**No Answer/ Missing**
210 (41%)	38 (7%)	154 (30%)	111 (21%)	6 (1%)
	Yes	No	Total	
Uses Non-Prescription, Homeopathic or Alternative Treatments	171 (33%)	348 (67%)	519 (100%)	
Top 5 Uses of these Remedies:	See details in footnotes below			
1. Arthritis[(a)]	2. Tonics and Overall Health[(b)]	3. Flea/Tick Control(c)	4. Digestion(d)	5. Allergy[(e)]
Performs ANY Health Screening Tests on Own Dogs[(f)]	Yes	No	Total	
	381 (73%)	138 (27%)	519 (100%)	
Performs CERF, Thyroid or Cardiac Screening AND	**Performs Only Initial Screening**	**Performs Repeat Screening**	**Total (based on 330 who perform these 3 tests)**	
	204 (62%)	126 (38%)	330 (100%)	
Eliminated Own Dog(s) From Breeding Based on Screening Test Results	**Yes**	**No**	**Total**	
	189 (36%)	330 (64%)	519 (100%)	

Table 8, (Cont'd).

		Number
Tests Used to Eliminate Dog(s) (includes screening and other health problems)	1. Hip X-Ray	103
	2. Cardiac Ultrasound	51
	3. Thyroid	30
	4. CERF (tied with #5)	22
	5. Temperament	22
	6. Cardiac OFA (tied with #7)	9
	7. Elbow X-Rays	9
	8. Von Willebrand	6
	9. Other[(a)]	28

[(a)] Other includes a variety of health problems.

Table 8, (Cont'd).

	Yes	No	Total
Performs Formal Temperament Testing	57 (11%)	462 (89%)	519 (100%)
	Yes	No	Total
Used Elective Gastropexy to Prevent a Dane from Bloating	101 (19%)	418 (81%)	519 (100%)
	Yes	No	Total
If Elective Gastropexy, was Dog used for Breeding <u>after</u> the Procedure?	28 (28%)	73 (72%)	101 (100%)

[(a)] Arthritis treatments included: glucosamine, chondroitin, MSM, flax, vitamin C, garlic, joint remedy, pear-rescue remedy.
[(b)] Tonics and overall remedies included: cranberries, apple cider vinegar, rutin, bee pollen, CoQ10, L-carnitine, melatonin, kava kava, raspberry leaves/tea, arnica.
[(c)] Flea and tick remedies included: tobacco, brewer's yeast, garlic, melalucca, peppermint.
[(d)] Digestive aids included: probiotics, enzymes.
[(e)] Allergy treatments included: yeast, essential fatty acids, licorice, sulfur. Some of the above products are used for more than one purpose.
[(f)] See details of individual screening tests in Table 8.

Table 9: Use of Health Screening Tests

Owners Perform	At Least Occasionally	Percent of 519	Always (%)	Sometimes (%)	Occasionally (%)	Never or No Answer (%)
Hip X-rays	353	68%	284 (55%)	50 (9%)	19 (4%)	39 (8%)
Vaginal Culture	308	59%	261(50%)	34 (7%)	13 (2%)	40 (8%)
Thyroid	292	56%	194 (37%)	63 (12%)	35 (7%)	81 (15%)
Brucellosis	290	56%	252 (49%)	28 (5%)	10 (2%)	43 (8%)
Cardiac OFA/Ultrasound	257	50%	141 (27%)	77 (15%)	39 (8%)	98 (19%)
Eye/CERF	218	42%	124 (24%)	66 (13%)	28 (5%)	136 (26%)
Elbow X-Rays	148	29%	65 (13%)	58 (11%)	25 (5%)	187 (36%)
von Willebrands Disease	124	24%	56 (11%)	45 (9%)	23 (4%)	206 (40%)

Table 10: Perceptions of Current Health Problems in Breed vs. Own Household

How does the overall health of the Great Danes in your household now compare to those in the past?	Number of households	Percent of Households	
Better Now	175	34%	
The Same	258	50%	
Worse Now	25	5%	
More than one answer	2	<1%	
Missing/Not Applicable	59	11%	
Total	519	100%	
Top 5 Reasons for Better Health Now (than in past)	1. Longer Lifespan 2. Better Overall Health 3. Greater Knowledge about the Breed 4. Less Bloat 5. Better Coat	**Top 5 Reasons for Worse Health Now (than in past)**	1. More Allergy Problems 2. More Bloat 3. . More Eye Problems 4. Shorter Lifespan[(a)] 5. More Autoimmune Problems[(a)] 6. More Skin Problems[(a)] 7. Poor Overall Health[(a)] 8. More Addison's Disease[(b)] 9. More Heart Problems[(b)]

Top 10 Problems in Own Household[(c)]	As Stated[(c)]	**Top 10 Problems in the Breed[(d)]**	As Stated[(d)]
1.Bloat	1.Bloat	1.Bloat	1. Bloat
2.Cancer	2.Cancer	2.Cardiomyopathy/Heart Problems	2. Heart Problems
3.Cardiomyopathy/Heart Problems	3.Heart Disease/Sudden Death	3.Cancer	3. Cancer
4.Arthritis	4.Arthritis	4.Hip Dysplasia	4.Cardiomyopathy
5.Allergies	5.Allergies	5.Joint Problems	5.Hip Dysplasia
6.Thyroid	6.Heart Problems	6.Torsion	6.Torsion
7.Torsion	7.Torsion	7.Thyroid	7.Thyroid
8.Eye Problems	8.Cardiomyopathy	8.Short Lifespan	8. Joint Problems
9.	9.Eye Problems	9.Wobbler's	9.Short Lifespan
10.	10.Thyroid	10.	10.Wobbler's

(a) Four reasons tied for 4th place.
(b) Two reasons tied for 5th place.

(c) Three problems in Owners' Household were related to heart disease (cardiomyopathy, heart failure, heart problems) and were combined into a single category.
(d) Two of the Top 10 Problems as a Breed were related to heart disease (cardiomyopathy, heart problems), so were combined into a single category. Responses as stated are also shown.

Table 11: Top 10 Health Problems in Own Household vs. Breed, by Respondent Group.

As Listed by Respondents	AKC Sample		GDCA		Affiliates			P-value
In Own Household	**(N=144)**	**%**	**(N=149)**	**%**	**(N=225)**	**%**	**Total**	
Bloat	40	28%	53	36%	60	27%	153	0.16
Cardiomyopathy/Heart Problem	24	17%	25	17%	43	19%	92	0.8
Cancer	20	14%	24	16%	38	17%	82	0.7
Arthritis	17	12%	16	11%	24	11%	57	0.9
Allergies	16	11%	14	9%	23	10%	53	0.8
Thyroid	5	3%	12	8%	19	8%	36	0.15
Torsion	6	4%	16	11%	14	6%	36	0.07
Eyes	8	6%	11	7%	10	4%	29	0.5
Joint	13	9%	6	4%	7	3%	26	0.15
Digestion	7	5%	2	1%	13	6%	22	0.1
In Breed								
Bloat	81	56%	113	76%	128	57%	322	0.0002
Cardiomyopathy/Heart Problem	59	41%	80	54%	123	55%	262	0.01
Cancer	31	22%	47	32%	62	28%	140	0.15
Hip Dysplasia	20	14%	15	10%	24	11%	59	0.5
Joint	14	10%	9	6%	26	12%	49	0.2
Torsion	10	7%	20	13%	17	8%	47	0.09
Thyroid	9	6%	15	10%	19	8%	43	0.5
Longevity	9	6%	11	7%	15	7%	35	0.9
Wobblers	11	8%	5	3%	14	6%	30	0.3
Arthritis	8	6%	5	3%	11	5%	24	0.7

Hip dysplasia in the “breed” list may reflect the emphasis on hip screening as a method used by the more health conscious breeders as opposed to a serious/prevalent problem in today’s Great Danes. It may also be reflected as arthritis in the “own dog” list. Allergies and eye problems are notably absent in the “breed problems, yet are 5th and 7th in the “own dog” list.

Bloat as a breed problem was significantly more common as a response by GDCA members. Heart problems as a breed problem was significantly less common among the AKC respondents.

PART 2: Health History of Individual Dogs

The number of dogs reported in Part 1 did not always equal the number of individual dog data sheets returned in the survey. The following data includes only information from the individual dog components of the survey in Part 2 (1564 dogs).

Table 12: Individual Dogs: Demographic Information

Gender	**Male (%)**	**Female (%)**	**Total**	
	638 (41%)	926 (59%)	1564 (100%)	
Vital Status at Time of Survey	**Alive (%)**	**Dead (%)**	**Missing/Unknown**	**Total**
	1073 (69%)	452 (29%)	39 (2%)	1564 (100%)
Age in Years	**Mean (Average)**	**Median**	**Minimum[(a)]**	**Maximum**
At Present (if alive)	6	6	0.75	15
At Death (if dead)	7	7	0.3	13
Color	**Number of Dogs**	**(%)**		
Fawn	603	38.6%		
Harlequin	298	19.1%		
Brindle	263	16.8%		
Black	173	11.1%		
Mantle	86	5.5%		
Other	64	4.1%		
Blue	63	4.0%		
Merle	48	3%		
Black and White	10	0.6%		
White	5	0.3%		
Blue Brindle	1	0.06%		
Missing	14	0.9%		
Total	1564	100%		

[(a)] Individual Dog Forms were to be filled out for dogs over 6 months. Information on puppies less than 6 months was collected as part of the reproductive history of the puppy's dam.

Table 13: Deaths, by Cause and Gender

Cause Of Death	Total Number of Deaths	Number of Male Deaths	Percent of Male Deaths	Number of Female Deaths	Percent of Female Deaths
Cancer, Other /Tumor	66	25	12%	41	17%
Heart Failure/Other Heart	40	25	12%	15	6%
Bloat	38	16	8%	22	9%
Euthanasia	36	18	9%	18	7%
Bone Cancer	27	10	5%	17	7%
Cardiomyopathy (a)	25	12	6%	13	5%
Bloat with Torsion (GDV)(b)	23	12	6%	11	5%
Accident/Trauma	18	7	3%	11	5%
Post-Surgical. Complication(c)	12	2	0.9%	10	4%
Renal Disease/Failure	10	6	3%	4	2%
Euthanized for Temperament	6	5	2%	1	0.4%
Splenic Torsion	5	2	0.9%	3	1%
Sudden or Unexplained Death	3	0	0%	3	1%
Missing/Unknown	71	33	16%	38	15%
Other	72	33	16%	39	16%
Total Deaths	452	206	100.0%	246	100.0%

(a) Only includes responses specified as cardiomyopathy.
(b) GDV: Gastric Dilation Volvulus (Gastric Torsion)
(c) Includes surgical emergencies: shock, DIC, blood clot, stroke, etc.

Table 14: Causes of Death, Comparing Males and Females

	Number of Deaths	Percent of Total Deaths	Males (%) n=206	Ranking for Males	Females (%) n=246	Ranking for Females
Cause of Death						
Cancer	93	21%	17%	2	24%	1
All Heart Disease	65	14%	18%	1	11%	3
Bloat and other gastrointestinal problems	61	14%	18%	3	16%	2
Euthanasia[(a)]	36	8%	9%	4	7%	4
Accident	18	4%	3%	5	5%	5
Renal Disease	10	2%	3%	6	2%	7
Post-Surgical Complications	12	3%	1%	8	4%	6
Euthanized for Temperament	6	1%	2%	7	0.4%	9
Sudden or Unexplained Death	3	0.7%	0%	--	1%	8
Other than above	72	16%	NA	--	NA	--
Missing/Cause Unknown	22	5%	NA	--	NA	--
Total Deaths	452	100%	206	--	246	--

(a) Includes dogs euthanized due to old age, terminal illness, paralysis, etc.

Rankings for males vs. females for most causes of death were fairly similar. Heart disease was the most frequent cause of death among males whereas among females, cancer was the most common cause of death.

Table 15: Health Problems, by Body System

	Number of Cases	Percent Affected (of 1564)	Average Age at Onset (years)	Median Age at Onset (years)	Minimum Age at Onset (years)	Maximum Age at Onset (years)
1. Eyes and Ears						
Eyes/Vision						
Ectropion	58	4%	0.7	0.6	0.1	2
Entropion	46	3%	0.9	0.7	0.1	5
Eversion of Nictating Membrane	38	2%	2	0.6	0.0	9
Cataracts	53	3%	6	7	0.1	12
Glaucoma	5	0.3%	8	6.0	5.5	13
Other Eye Problems	28	2%	2	1.1	0.2	8
Total Eye Problems	228	15%	--	--	--	--
Ears/Hearing						
Congenital Deafness	13	0.8%	0.8	0.8	0.1	8
Adult Onset Deafness	3	0.2%	7	6	5.5	13
Total Ear Problems	16	1%	--	--	--	--
2. Nervous System						
Wobblers	31	2%	4	4	0.8	8
Seizures	20	1%	3	3	0.3	9
Myelopathy	8	0.5%	8	9	5	9
Other[(a)]	11	0.7%	--	--	--	--
Total	70	4.5%	--	--	--	--

[(a)] Other includes spinal degenerative disease and other types of neuropathies.

See Tables A4 and A5 in the Appendix for a list of “other” problems.

Table 15, (Cont'd).

	Number of Cases	Percent Affected (of 1564)	Average Age at Onset (years)	Median Age at Onset (years)	Minimum Age at Onset (years)	Maximum Age at Onset (years)
3. Muscle and Skeletal Problems						
Arthritis	212	14%	8	7	2	11
Spondylosis	65	4%	6	6	1	11
Hypertophic Osteodystrophy (HOD)	36	2%	0.5	0.3	0.1	3.5
Osteochondritis Dissecans (OCD)	36	2%	0.9	0.6	0.3	3
Panosteitis (Pano)	75	5%	1.5	0.7	0.3	11
Hip Dysplasia (on X-Ray, no symptoms)	40	3%	2	2	0.3	10
Hip Dysplasia (with symptoms)	35	2%	3	2	0.3	10
Elbow Dysplasia	8	0.5%	1	1	0.4	2
Craniomandibular Osteopathy	1	0.1%	n/a	n/a	--	--
Other Skeletal Problems[(a)]	45	3%	--	--	--	--
Total Skeletal Problems	553	35%	--	--	--	--
4. Endocrine Problems						
Hypothyroid	70	5%	4	4	1	10
Hyperthyroid	12	0.8%	3	2.5	1.5	6
Addison's Disease	5	0.3%	4	4	1.5	6
Diabetes	5	0.3%	8	8	6	10
Other Endocrine	16	1%	5	5.5	1	9
Total Endocrine Problems	108	7%	--	--	--	--

[(a)] Other skeletal problems include injuries, both traumatic and exercise-related and various non-specific types of joint inflammation, lameness, etc.

See Tables A6 and A7 in the Appendix for a list of "other problems".

Table 15, (Cont'd).

	Number of Cases	Percent Affected (of 1564)	Average Age at Onset (years)	Median Age at Onset (years)	Minimum Age at Onset (years)	Maximum Age at Onset (years)
5. Blood Diseases						
Anemia	13	0.8%	4	3	0.3	9
Von Willebrand's disease	5	0.3%	3	2	2	5
Hemophilia	3	0.2%	n/a	n/a	--	--
Other(a)	9	0.6%	2	2.5	1.0	3.5
Total Blood Diseases	30	2%	--	--	--	--
6.Infection/Immune Disorders						
Tonsillitis	84	5%	1	1	0.3	4
Chronic Respiratory Infections	14	0.9%	6	7.5	1	10
Other(b)	34	2%	3	2	0.5	8
Total Infectious/Immune	132	8%	--	--	--	--
7. Renal/Urinary Diseases						
Renal Dysplasia	7	0.4%	6	8	0.3	9.5
Cystinuria	3	0.2%	2	2	0.9	3.5
Other(c)	29	2%	3	3	0.1	10.5
Total Kidney	39	2.5%	--	--	--	--

(a) Other includes: disseminated intravascular coagulation, other clotting disorders, etc.
(b) Other includes: kennel cough, pneumonia, lupus, inflammatory bowel disorders, etc.
(c) Other includes: nephritis, bladder infection and various urinary tract infections except as listed under reproductive disorders.

See Tables A8, A9 and A10 for a list of "other" problems.

Table 15, (Cont'd).

	Number of Cases	Percent Affected (of 1564)	Average Age at Onset (years)	Median Age at Onset (years)	Minimum Age at Onset (years)	Maximum Age at Onset (years)
8. Heart Diseases/Conditions						
Heart Murmur	75	5%	5	5	0.2	9
Cardiomyopathy	72	5%	6	6	1	10
Early Onset or Sudden Death from Cardiomyopathy	28	2%	6	6	1	9.5
Subaortic Stenosis (SAS)	3	0.2%	4	4	0.4	7
Tricuspid Valve Defect	3	0.2%	3	3	0.8	5
Mitral Valve Defect	2	0.1%	n/a	n/a	--	--
Patent ductus arteriosis (PDA)	0	0%	--	--	--	--
Persistent right aortic arch	0	0%	--	--	--	--
Other Heart Disease	26	2%	--	--	--	--
Total Heart Disease	209	13%	--	--	--	--
9. Cancer						
Bone Cancer (Osteosarcoma)	49	3%	7	7	3	10.5
Breast Cancer	24	1.5%	7	7	3	10
Fibrosarcoma	22	1%	7	6.5	4	11
Lymphosarcoma	12	0.8%	5	4.5	3.5	6.5
Other(a)	67	4%	N/a	--	--	--
Missing Type or Euthanized without Treatment	61	4%	n/a	--	--	--
Total Cancers	235	15%	--	--	--	--

See Tables A11 and A12 for a list of "other" problems.

Table 15, (Cont'd).

	Number of Cases	Percent Affected (of 1564)	Average Age at Onset (years)	Median Age at Onset (years)	Minimum Age at Onset (years)	Maximum Age at Onset (years)
10. Skin/Allergy Problems						
Acne	228	15%	0.8	0.7	0.2	3
Allergies	160	10%	2	1	0.3	10
Chronic Staphlococcal Infection	64	4%	2	1	0.2	7
Demodectic Mange	61	4%	0.9	0.5	0.1	8.5
Juvenile Pyoderma	42	3%	0.6	0.7	0.3	1.5
Other Skin Problems(a)	36	2%	5	4.5	1	8
Total Skin Problems	591	38%	--	--	--	--
11. Temperament Issues						
Aggressiveness toward Dogs	184	12%	2	2	0.2	8
Aggressive toward Humans	72	5%	2	2	0.2	6
Fearfulness	130	8%	1	0.8	0.3	7
Rage Syndrome	13	0.8%	4.5	4.5	3	6
Other Temperament Problems(b)	22	1%	0.5	4.5	3	6
Total Temperament Problems	421	27%	--	--	--	--
12. Gastrointestinal System						
Bloat						
With Torsion	172	11%	6	6	0.6	11
Without Torsion	64	4%	5	4.5	0.3	11.5
Excessive Salivation	31	2%	2	1	0.5	6
Megaesophagus (Adult)	13	0.8%	6.5	7	0.2	11
Esophageal Hypomobility	5	0.3%	3	3	2	3.5
Other Gastrointestinal Problems(c)	37	2%	N/a	N/a	--	--
Total GI	322	21%	--	--	--	--

[(a)] Other skin problems include: lick granuloma, rash, non-specified dermatitis, etc.
[(b)] Other temperament problems include: behavioral problems such as destructiveness, housebreaking issues, etc.
[(c)] Other gastrointestinal problems include: indigestion, flatulence, loose stools/diarrhea, anal gland problems, etc.

See Tables A13, A14 and A15 for a list of “other” problems.

Table 16: Treatment Information for a Selected Subset of Health Problems

Body System	Number of Dogs	Number with Medical Treatment	Number with Surgical Treatment	Number with Other Treatment
Nervous System				
Wobblers	31	13	5	7
Seizures	20	8	1	6
Myelopathy	8	3	0	1
Muscles/Skeleton				
Arthritis	212	102	1	46
Panosteitis	75	39	0	14
Spondylosis	65	35	1	18
other	45	17	11	8
Hip dysplasia (no symptoms)	40	6	0	6
Hypertrophic Osteodystrophy (HOD)	36	26	0	8
Osteochondritis Dissecans (OCD)	36	13	16	4
Hip dysplasia (symptomatic)	35	11	1	9
Elbow dysplasia	8	2	2	1
Craniomandibular osteopathy	1	1	0	0
Gastrointestinal				
Bloat with torsion	172	25	111	14
Bloat without torsion	64	31	24	6
Cardiovascular				
Heart murmur	75	15	0	3
Cardiomyopathy	72	42	0	6
Early onset/sudden death	28	6	0	0
Cancer		**Chemotherapy**	**Surgical Treatment**	**Radiation Treatment**
Euthanized without treatment	61			
Osteosarcoma	49	5	7	1
Breast cancer	24	0	15	0
Fibrosarcoma	22	0	11	0
Lymphosarcoma	12	6	3	0
Female Health Problems		**Medical Treatment**	**Surgical Treatment**	**Other Treatment**
Infertility	14	2	0	1
Pyometra	65	31	40	1
Male Health Problems				
Prostate disease	47	33	23	3

Sterility	20	6	1	0

Table 17: Common Health Problems (> 3% of all dogs) Analyzed by Gender

Health Problem	Total Number of Cases	Number of Males	% Males	Number of Females	% Females	P-value
Arthritis	212	79	37%	133	63%	0.3
Acne	228	93	41%	135	59%	0.002
Aggressive to dogs	184	69	38%	115	63%	0.7
Bloat with torsion	172	77	45%	95	55%	0.7
Allergies	160	75	47%	85	53%	0.1
Fearfulness	130	52	40%	78	60%	0.7
Tonsillitis	84	41	49%	43	51%	0.2
Panosteitis	75	45	60%	30	40%	0.001
Heart murmur	75	37	49%	38	51%	0.1
Cardiomyopathy	72	45	63%	27	38%	<0.0001
Aggressive to humans	72	44	61%	41	39%	<0.0001
Hypothyroidism	70	34	49%	36	51%	0.2
Spondylosis	65	26	40%	39	60%	0.9
Bloat without torsion	64	19	30%	45	70%	0.05
Ectropion	58	30	52%	28	48%	0.08
Cataracts	53	12	23%	41	77%	0.006
Osteosarcoma	49	18	37%	31	63%	0.6

Male Great Danes were significantly **less** likely than females to have acne, bloat without torsion and cataracts. Males were also significantly **more** likely than females to have panosteitis, cardiomyopathy or aggressiveness toward humans.

Table 18: Common Health Problems (> 3%), by Color Family with Hip Dysplasia and Ectropion Included as a Special Interest

	Color Family[(a)]	Yes	%	No	%	Total	P-value
Arthritis	Fawn	117	14%	749	86%	866	0.4
	Harlequin	68	15%	380	85%	448	
	Black	27	11%	209	89%	236	
Spondylosis	Fawn	32	4%	834	96%	866	0.007
	Harlequin	29	7%	419	93%	448	
	Black	4	2%	232	98%	269	
Hip Dysplasia with	Fawn	16	2%	850	98%	866	0.02
Symptoms	Harlequin	17	4%	431	96%	448	
	Black	2	1%	234	99%	236	
Hip Dysplasia, X-Ray Only- No Symptoms	Fawn	20	2%	846	98%	866	0.6
	Harlequin	11	2%	437	98%	448	
	Black	8	3%	228	97%	236	
Panosteitis	Fawn	43	5%	823	95%	866	0.9
	Harlequin	21	5%	427	95%	448	
	Black	11	5%	225	95%	236	
Osteosarcoma	Fawn	22	3%	844	97%	866	0.2
	Harlequin	16	4%	432	96%	448	
	Black	11	4%	235	96%	246	
Acne	Fawn	129	15%	737	85%	866	0.6
	Harlequin	30	13%	206	87%	448	
	Black	68	15%	380	85%	236	
Allergies	Fawn	86	10%	780	90%	866	0.8
	Harlequin	49	11%	399	89%	448	
	Black	25	10%	211	90%	236	
Tonsillitis	Fawn	74	9%	792	91%	866	<0.0001
	Harlequin	5	1%	443	99%	448	
	Black	5	2%	231	98%	236	
Hypothyroidism	Fawn	35	4%	831	96%	866	0.03
	Harlequin	15	3%	433	97%	448	
	Black	18	8%	218	92%	236	

Table 18, (Cont'd).

Bloat with Torsion	Fawn	109	13%	757	87%	866	0.04
	Harlequin	36	8%	412	92%	448	
	Black	25	11%	211	89%	236	
Bloat without Torsion	Fawn	50	6%	817	94%	866	0.005
	Harlequin	9	2%	439	98%	448	
	Black	8	3%	228	97%	236	
Ectropion	Fawn	23	3%	843	97%	866	0.02
	Harlequin	26	6%	422	94%	448	
	Black	9	4%	227	96%	236	
Entropion	Fawn	29	3%	837	97%	866	0.2
	Harlequin	8	2%	440	98%	448	
	Black	9	4%	227	96%	236	
Cataracts	Fawn	28	3%	838	97%	866	0.3
	Harlequin	13	3%	435	97%	236	
	Black	12	5%	224	95%	448	
Heart Murmur	Fawn	55	6%	811	94%	866	0.002
	Harlequin	9	2%	439	98%	448	
	Black	11	5%	225	95%	236	
Cardiomyopathy	Fawn	44	5%	822	95%	866	0.7
	Harlequin	18	4%	430	96%	448	
	Black	10	4%	226	96%	236	
Aggressiveness toward humans	Fawn	34	4%	832	96%	866	0.2
	Harlequin	27	6%	421	94%	448	
	Black	11	5%	225	95%	236	
Aggressiveness towards dogs	Fawn	87	10%	779	90%	866	0.05
	Harlequin	63	14%	385	86%	448	
	Black	33	14%	203	86%	236	
Fearfulness	Fawn	64	7%	802	93%	866	0.2
	Harlequin	39	9%	409	91%	448	
	Black	26	11%	210	89%	236	

Fawn family=fawn or brindle
Harlequin family=harlequin, merle, white, mantle, black and white, all other harlequin variants
Black family=blacks from black breeding and blue.

[(a)] Fourteen dogs were missing data on color.

The data presented in Table 18 correspond to those in Table 17, except the various conditions have been rearranged to group them by body system. Bloat with or without torsion, tonsillitis, heart murmur, hypothyroidism, spondylosis, ectropion and symptomatic hip dysplasia are significantly associated with color family. Fawns are more commonly reported to have tonsillitis and bloat without torsion than the other two color families. Black family dogs are more likely to have hypothyroidism. Harlequins are less likely than the other color families to have bloat with torsion and heart murmurs. Harlequins are more commonly reported to have spondylosis, ectropion and hip dysplasia with symptoms than the other two color families.

Table 19: Data on Female Reproductive Status and Related Health Problems

Total Females in Survey	**Females, but Missing Reproductive Data**	**Females with Usable Reproductive Data**				
926	19	907				
Current Reproductive Status			**Mean Age at Spay (years)**	**Median Age at Spay (years)**	**Minimum Age at Spay (years)**	**Maximum Age at Spay (years)**
Spayed	472 (includes some bitches previously bred)		4	3.5	0.3	10
Intact	406					
Unknown/Missing	29					
Ever Bred	455					
Bitches with Regular Cycles	341					
Total Number of Heat Cycles Bred	958		Overall Per Breeding Success Rate			
Total Conceptions	716		75%			
Total Litters Produced	702					
Female Reproductive Problems			**Mean Age at Onset (years)**	**Median Age at Onset (years)**	**Minimum Age at Onset (years)**	**Maximum Age at Onset (years)**
	Number of Cases	Percent (of 907)				
Pyometra	65	7%	4	4	0.7	10.5
Infertility	14	1.5%	3	3	2	5

Other[(a)]	32	3.5%	3	2.5	0.5	9
Total Disorders	111	12%	--	--	--	--

[(a)] See Table A17 in the Appendix for a complete list.

Table 20: General Female Reproductive Outcomes from Section B in Part 2

Total Females in Survey	**Females with Reproductive Data**	**Total Females Ever Bred**	**Percent of Females Ever Bred**				
926	907	455	50.2%				
Total Females with C-Section (ever)	**Total C-Sections Performed**	**Mean & Median Number of C-Sections (per female)**	**Number Bitches with 1 C-Section**	**Number Bitches with 2 C-Sections**	**Number of Bitches with 3 C-Sections**	**Percent of Bred Females with C-Section (ever)**	**Percent of Litters Delivered by C-Section**
134	142	1	106	14	3	30%	142/702=20%
Conception Rates							
Total Females Ever Bred	**Mean & Median Number of Heat Cycles Bred (per female)**	**Minimum Number of Heat Cycles Bred (per female)**	**Maximum Number of Heat Cycles Bred (per female)**		**Total Bitches with Data on Litters Produced**		
455	2	1	7		402		
Total Females Bred who Conceived[(a)]	**Mean Number of Conceptions (per female)**	**Median Number of Conceptions (per female)**	**Minimum Number of Conceptions (per female)**	**Maximum Number of Conceptions (per female)**		**Percent of Females Ever Bred Who Conceived[(a)]**	**Total Number of Litters Conceived**
405	2	1.5	1	6		89%	716
Total Number of Litters Produced	**Mean Number of Litters Produced (per female)**	**Median Number of Litters produced (per female)**	**Minimum Number of Litters Produced (per female)**	**Maximum Number of Litters Produced (per female)**			
702	2	1	1	10			

[(a)] Conceived/Conception refers to a confirmed pregnancy by palpation or ultrasound.

Table 21: Female Reproductive Outcomes Based on Mating Attempts and Type of Insemination

		Total Females in Survey	Total Females Ever Bred	Bitches Missing Data for This Table	Average Number of Pups (per female)	Average Litter Size
		926	455	27	12	7
Conception Rates, by Type of Breeding	**Total Number of Heat Cycles Bred**	**Total Breedings (%)**	**Total Number of Successes**	**Success Rate (%)**	**Mean & Median Litter Size (# pups)**	**Maximum Litter Size**
Natural Service	777	81%	570	73%	7	16
Frozen Semen	81	8.5%	54	66%	5	12
Chilled Semen	73	8%	45	62%	6	15
Unspecified[(a)]	28	3%	N/a	n/a	n/a	n/a
Total Breedings Reported for Mating Attempts	958	100%	672	70%	6 (includes known types of breeding only)	--

[(a)] "Unspecified" category exists because the number of heat cycles bred does not match the number of charts filled out about the result of mating attempts. Therefore, the type of service, whether pregnancy resulted and the litter size, if a litter resulted, was not recorded.

Table 22: Puppy Survival and Health Problems from Section C, Part 2 on a Per Dam Basis

	Number of Pups with this Outcome	Mean Number Pups per Bitch	Median Number Pups per Bitch	Maximum Number of Pups per Bitch	Number Bitches Producing at least One of These Pups	% of Bitches Bred Producing at least One of These Pups
Total Pups Produced	4773	12	9	150	405	100%
Born Alive	4391	11	9	140	401	99%
Stillborn	382	2	2	10	168	42%
Pup died within 1-14 days	218	2	1	10	109	27%
Pup died within 15-60 days	75	2	1	7	48	12%

Details of Birth Defects	Number of Pups with this Outcome	Mean Number Pups per Bitch	Median Number Pups per Bitch	Maximum Number of Pups per Bitch	Number of Dams Who Produced These Pups	Percent of Dams Who Produced These Pups
Normal Live Puppies	3730	4	0	135	383	95%
Pups with Congenital Defects, by Type	349	2	1	1	223	43%
Megaesophagus	70	2	1	6	45	19%
Kinked Tail	54	1	1	1	43	11%
Heart Defects	45	1.5	1	6	30	11%
Wobbler Syndrome	34	1	1	4	25	7%
Cleft Palate	24	1	1	1	21	6%
Abdominal Closure Defect	10	1	1	1	10	2.5%
Other Defects[(a)]	112	1.5	2	9	77	19%

[(a)] Other congenital defects include: ocular and visual defects, hernias, white puppies, spinal or limb deformities, mono/cryptorchidism, hip deformity, renal dysplasia/failure, hepatic shunt, deafness.

See Table A18 in the Appendix for a complete listing.

Table 23: Reproductive Information for Males from Section A, Part 2

Total Males in Survey		**Males with Usable Reproductive Data**	**Males, but Missing Reproductive Data**			
639		605	34			
Current Reproductive Status			Mean Age at Neuter (years)	Median Age at Neuter (years)	Minimum Age at Neuter (years)	Maximum Age at Neuter (years)
Neutered	207 (includes some males previously bred)		3	2	0.2	9.5
Intact	365					
Unknown/Missing	33					
Used for Breeding/ Sired Litter(s)	204/188		Average Number of Litters Produced (for males used at stud)	Median Number of Litters Produced (for males used at stud)	Minimum Number of Litters Produced (for males used at stud)	Maximum Number of Litters Produced (for males used at stud)
Number of Litters Produced	799		4.3	3	1	40
Reproductive Disorders			Average Age at Diagnosis (years)	Median Age at Diagnosis (years)	Minimum Age at Diagnosis (yrs.)	Maximum Age at Diagnosis (yrs.)
	Number of Cases	Percent (of 605)				
Prostate Disease	47	8%	5	5	2	9
Other[(a)]	21	3.5%	2.5	2	0.2	7
Sterility	20	3%	5	5	0.6	9
Total Disorders	88	14.5%	--	--	--	--

[(a)] Other includes such disorders as mono/cryptorchidism, penile bleeding, urinary tract infections, sperm abnormalities including low count, low motility or abnormal or dead sperm, testicular degeneration, low libido, etc. See Table A16 in the Appendix for a complete listing.

Appendix: Lists of "other" write in answers for each area of the survey.

PART 1:
Table A1: Other information for question 5 and 6 about involvement in Great Danes

Other Great Dane involvement
AKC judge
animal assisted therapy (SPCA) - work in retirement homes & hospitals
Breed club officer
CBC, Therapy
Conformation
combo-owner, rescuer, exhibitor
Conformations
Family dogs & walking companions
Great dane club, up
have stud dogs
Judge (6 times)
judge; past breeder/exhibitor
mentor&educator
Obedience
obedience, tracking ability
obedience-beginner levels
owner handler
owner handler
Past breeder & exhibitor
performance sports, obedience, agility, flyball, tracking, wt pull
Performance team
place puppies in homes
show obedience
show occasionally; just bred 1st litter
sometimes pets/sometimes exhibitors
Stewarding
Therapy
therapy dog
therapy handler/evaluator
Veterinarian
will start exhibiting this year
Other performance activities
AKC shows
CGC
Conformation
Freestyle
Frisbee

fun match
herding
jumps horse jumps
obedience classes
obedience; all dane drill team therapy work
parades, games
photo & film modeling for free of charge
therapy shows, school visits, AKC Canine Ambassador
tracking
tracking
tracking
tracking - 2
tracking, therapy
tracking: 5 titles in past 5 yrs
Train for show ring
weight pulling, tracking

Table A2: Other foods used in the household (questions 7 and 8)

Other Dog Foods
add raw bones & veggies
added raw meat/bone meal & veggies
added: cooked chicken or beef; cheese
AFS meat
Beef
beef & chicken daily
boiled chicken/hamburger
brown rice, organic chicken, veggies all cooked
brown rice/chicken/veg's
canned veggies & fresh cooked
chicken & rice wet food
chicken leg & thighs - pressure cooked
chicken thighs
cook for them
cooked chicken
cooked chicken & cottage cheese
cooked chicken, pork, beef
cooked organic white & brown rice, organic chicken, carrots, spinach & garlic
cooked veggies & chicken
dry & boiled chicken w/ steamed veggies
dry rice, turkey, vegs
dry w/ wet added
egg yolk & 1 tbsp oil 3x week
freq. Steam broc. & bake squash added to food
fresh carrots & green beans
fresh chicken pressure cooked
fresh cooked chicken

Fresh meat/chicken-cooked
fried chicken livers, hot dogs, sausage, cottage cheese, rice, potatoes
Fruit
ground beef & rice (cooked & frozen)
hamburger, cottage cheese
holistic dry & raw meat
home cooked
home cooked chicken stew
home cooking
home cooking
homemade stew
homemade stew of ground turkey & chicken hearts & gizzards w/ dry kibble
human food
human food
IVD for allergic dog
leftovers from table
meat added w/kibble
minimal cooked
mixed vegetables, ground beef
mixture w/rice, beef, yogurt
natural balance, solid gold, buckaroo beef
Nutri
Occasional table scraps & treats
owner lists table food fed 3 times a day
pet botanics-lamb & brown rice
plain yogurt
Plus 1/8 baked chicken w/ bones
raw apple cider vinegar
raw beef
raw chicken and liver mixed with rice, pasta, & kibble
Rice & Chicken gizzards
rice & liver/chicken added
Science Diet C/D
scrap veggies, meat, pasta
Scraps
scraps, etc
small amount of leftovers
small amount of table scraps
soak dry kibble till it puffs
Solid Gold treats, DVP Lamb & Rice Roll
some par cooked ground chicken
some raw around meat
steak, chicken, ham
super premium kibble & meat veggie
table food
table food
table food - meat/veggies; no fried foods
table food mixed w/kibble

table food-broiled salmon or cheese
table leftovers-meat&vegs
table scraps, fruit, etc.
Vegetables
Yogurt
Other Puppy Foods If Use Different than Adults
add pup food after 9 months
adult foods nutritionally suited to puppies
adult kibble w/o yogurt, cheese, etc
adult premium kibble w/some ground beef
AFS raw meat
always 23% protein or less
bil jac puppy
Bil-Jac puppy
biljac w/ goats milk then puppy kibble til 6 mo
but lower protein levels
but, large breed puppy
canned & dry til 12wks
chicken broth, goat milk, small kibble, baby gerber rice
DAD'S
Diamond puppy up to 6 mo
different brand, protein level-Eagle
different brands of kibble than the adult
dry kibble - different brand: lower protein as pedigree adult not puppy
dry kibble moistened
dry kibble only (Eagle Natural)
dry puppy chow
dry with different protein levels
Eagle
Eagle blue bag
Eagle kennel Pak for 1st 12 mos.
Eagle lamb & rice (dry, different brand)
eagle lamb & rice; eagle maint
eagle nat pack w/last 2 litters
Eagle Natural
Eagle natural pack
eagle original
eagle pack spec. premium
Eagle puppy
Eagle puppy chow
eukanuba
Eukanuba for lg. breed puppies
eukanuba large breed adult
Eukanuba Large Breed Puppy
Eukanuba large breed puppy food
Eukanuba Lg. Breed diet; Low fat & protein
eukanuba or natural choice for puppies

eukanuba puppy
eukanuba puppy
Eukanuba puppy
Eukanuba puppy - can food
Eukanuba puppy - lg breed
Eukanuba puppy & weaning formula
Eukanuba/Iams-large breed puppy
Fromm
higher protein for 1st 12 wks
Hypro Max
IAMS
IAMS Large breed puppy food
IAMS lg. Breed puppy
IAMS lg. pupp
IAMS Maint.
IAMS Maintenance Adult
IAMS puppy
IAMS puppy
IAMS puppy
Iams puppy
IAMS puppy
IAMS puppy chow
IAMS puppy dry & canned
Iams puppy food
Iams puppy for lg breeds
IAMS puppy lg breed
IAMS weaning formula
IAMS yellow bad up to 12 wks
innova
kibble
kibble only, 23% protein or less with yogart
lg breed Eukanuba puppy
Lg breed puppy Eukanuba
Lg breed puppy version
low protein diet
low protein/phosphorous mix nutro lamb&rice
lower protein
lower protein
lower protein kibble for pups
mix small amnt of adult w/ puppy food
mostly Diamond
natural life puppy food with gerbers baby
nature's recipe
no meat
nutra nuggets mixed w/goat milk
Nutri for puppies
Nutro lamb & rice
Nutro lamb & rice & 1/2 Nutro lite

nutro lamb & rice maint & lite
nutro lamb/rice puppy
Nutro Max puppy
Nutro or Iams puppy
nutro puppy
pedigree
Pedigree adult
pedigree dry & can
Pedigree dry mixed w/water or goat milk
Pedigree Meal time
pedigree only
Pedigree puppy
Pedigree puppy til 6 mo
plus eukanuba lg breed puppy
plus goat milk & cottage cheese added ground beef (raw)
Pro Plan Puppy Formula
puppy brand
puppy brand
Puppy chow
Puppy Chow
Puppy Chow
Puppy chow
Puppy Chow & canned
puppy chow & powdered milk
puppy chow formula
puppy chow soaked in fesh goat milk
puppy chows
puppy dry food
puppy food
puppy food
puppy food
puppy food, kibble
puppy formula for giant breeds
puppy formula when very young, then adult food @ 8-10wks
puppy formula, dry till age one
Puppy IAMS
puppy lamb & rice
puppy Science Diet
puppy version Pedigree
Purina Dog Chow
purina large breed puppy chow
Purina Large Breed Puppy Food
Purina One Purina Puppy Chow
Purina Puppy chow (13 times)
Purina Puppy Chow & Iams
Purina Puppy Chow & Plain yogurt
purina puppy chow briefly adult nutro max
purina puppy chow/ adult nutro max

reduced fat Bil-Jac only
royal canin or nutro natural large breed puppy
same brand only puppy formula
same brand, but puppy formula
same brand/lower protein
science diet
Science Diet
science diet growth
Science Diet Large Breed Growth
Science Diet large breed puppy
science diet maintenance
Science Diet Maintenance
Science Diet/Iams Puppy-no table food
Sciend Diet Maintenance
sensible choice
w/ top dressing of dry milk

Table A3: Complete listing of nutritional supplements used in the household (question 10)

Supplements listed by Respondents
algae, whole food supplements, garlic, herbs
Baby vitamins, vit. C, Fast Track
BAC PAC Plus
Bac Pac plus, nzymes, vit C, glucosamine/chondroitin to older dogs, MSM to older
Bac Pak Plus digestive enzymes
bee pollen, cranberry, glucosamine sulfate
Brewer's yeast & glucosamine, chondritin
Brewer's Yeast w/ Garlic
brewers yeast, kelp, vitamins
Catalyn-Ligaplex I
CE cod liver oil, alfalfa kelp
chondroitin sulfate
cod liver oil
colloidial mineral during pregnancy & after whelping, Ivomec
CoQ10
CoQ10, Bico Guard, daily greens, yogurt, apple cider vinegar, garlic
Cosequin
cosequin DS
cosequin, co-enzyme Q10, taurine, L-carnitine, vit C, MSM
daily greens
daily greens
derm caps
derm caps, nzymes, probiotics
Dermcaps
Dynamite Showdown
enzymes, glycoflex

enzymes, vit C
ester C w/bioflavonoids, CoQ10, vit E, alfalfa, flax seed oil & meal, fish oil, kelp, selenium
Ester C, CoQ10
Ester C, MSM, Bac pac plus
ester C, pro-biotic
ester C, vit E
Ester C, vit E, CoQ10, Selenium, enzymes
Ester C/CoQ10
Fast Trac
Fast Track canine support xtra bloom waste
Fastrac
fastrac, flax oil
fastrac, vit C, nzymes
fastrac, vit C, nzymes
Fastrack
Fastrack
fastrack, glucosamine/MSM
fastrack, vit C
fish oil, healthy powder-yeast, lecithin, kelp, bonemeal, vit C
flax seed; primrose; glucosamine/chondroitin/MSM
flaxseed oil/yogurt
glucosamine
glucosamine
glucosamine
glucosamine
glucosamine for old dogs
glucosamine for old dogs
glucosamine MSM for 6yr & older
glucosamine, chondritin
glucosamine, nzymes
glucosamine, vit c
glucosamine/chondroinine
glucosamine/chondroitin
glyco flex III, liqurdambar, chinese herb mixture
glycoflex 600 & papaya enzyme & cranberry capsules
GNC mega men multiple vit
Grand flex
Grand flex
joint care, synovicare
missing link
Missing Link, Vit C, Cod liver oil, fish oil
Mrs. Allen's shed stop
MSM Bufferin
MSM, glucosamine, fast track, L-carnitine
MSM, glycoflex III, cosequin, canine plus, fast trac
MSM, probiotics, nzymes, oxydrops, daily greens, vit C/B
MSM, sod, yucca, vit C, apple cider, glucosamine, vinegar
MSM, vit A/E, nzymes, apple cider, daily greens

multi
multi vitamin
multi vitamins
Multi Vits
multiple vitamin; vit C; Sea-meal
multiple vitamins
multivitamin E/C; glucosamine sulfate for older dog
multivitamin yeast/garlic tabs
nupro
nupro (older dogs)
nupro fastrack
Nutrilite brand people vitamins; grape seed extract; Co-Q10
nzymes
nzymes
nzymes, bac pak plus, glucosamine sulfate
older dog gets missing link seasonally
omega 3, C, B, iron, aluminum hydroxide, chonditron, glucosamine
Omega-3 fatty acids capsule 1/day
own blend vit C, fastrack
Pet Cal, Synovi-MSM
pet tab, vit C, calcium
pet tabs
pet tabs
pet tabs
Pet tabs
pet tabs plus
pet tabs plus, vit E, ester C, glucosamine, dermcap 100's, & fish oil caps
pet tabs, vet solutions omega-3 fatty acids
pet tabs, vit C, calcium
Pet Vite Tablets
probiotics
probiotics, vit C
prozyme
Prozyme
salmon oil, kelp, alfalfa, vit C/E, SOD, MSM, apple cider vinegar, raw glandular for thyroid
sea meal
sea meal
sea vegitation, missing link, vit C
select full spectrum antioxidant supplement
shaklee for people vita lea
Solid Gold brand "sea meal"
Specify
stress an English vitamin for puppies
Super 14
Super Bloom
synovi MSM
therain vitamins
Theralin

U-C, cod oil, solid gold
UHC
Vit C (45 listings Vitamin C only)
Vit C & daily greens
Vit C & E
Vit c & e
Vit C & E, Bee Pollen, CCM, Flinstones
Vit C & E, bone meal
Vit c & e, fastrack
Vit C & glucosamine
Vit C for puppies
Vit c for puppies
Vit C for puppies till 12mos
Vit C&E
Vit C, absorbate, canola oil, yogurt
Vit C, alfalfa, omega 3
Vit C, ambrotose, grand flex
Vit C, B, Omega 3 oils, alfalfa, kelp, bovine colostrum w/ transfer factor for unvaccinated pups
Vit C, B, Pet Cal, Glucosamine Chondrotin, Echinacea
Vit C, body guard
Vit C, cod liver oil
Vit C, CoQ10
Vit C, daily greens
Vit C, daily greens, probiotic
Vit C, derm caps, vit e, muscle stuff
Vit C, dynamite powder
Vit C, dynomite showdown, dynopro and kelp
Vit C, E, CoQ10
Vit C, E, COQ10, glucosamine, MSM, daily greens
Vit c, e, fish oil caps, pro-biotics
Vit c, e, kelp, alfalfa, digestive enzyme, acidophilus, fish oil
Vit C, fastrac
Vit c, fastrack
Vit C, fastrack
Vit C, fish oil
Vit C, fish oil
Vit c, flax oil
Vit C, flax seed oil, calcium
Vit C, glucosamine
Vit C, glucosamine chondroitin sulfate
Vit C, glucosamine, chondroitin
Vit C, glucosamine, chondroitin, ligaplex II
Vit C, glucosamine, chondroitin, other vit as needed
Vit C, glucosamine, flax seed oil, saw palmetto, MSM
Vit C, glucosamine, MSM
Vit C, glucosamine/chondroitin
Vit C, glucosamine/chondroitin
Vit C, glucosamine/chondroitin

Vit C, glucosamine/chondroitin
Vit C, glycoflex
Vit C, MSM
Vit C, MSM, gluco/chondroitin, saw palmetto
Vit C, multi vitamin
Vit C, nzymes
Vit C, nzymes, carocina canine mix
Vit C, omega 3, vit E, kelp, apple cider vinegar
Vit C, pain free
Vit C, pet tab, glucosamine & chondroitin
Vit C, ProBios, BodyGuard, glucosamine for seniors
Vit C, probiotic, goat milk
Vit C, probiotics
Vit C, probiotics power pack/glucosamine, MSM, oxydrops
Vit C, probiotics, MSM
Vit C, yogurt
Vit C/A/E, selenium, MSM
Vit C/B/E, glucosamine, chondroitin
Vit C/E
Vit C/E
Vit C/E
Vit C/E
Vit C/E
Vit C/E
Vit C/E, B vit complete, flaxseed oil
Vit C/E, B-complex, probiotics
Vit C/E, coQ10
Vit C/E, fish oil
Vit C/E, fish oil, kelp, enzymes, cod liver
Vit C/E, glucosamine, chondroitin sulfate, amino acids, CoQ10, enzymes, probiotics, cranberry
Vit C/E, ground flax seeds, carotene, evening primrose oil
Vit C/E, kelp
Vit C/E, kelp, fastrack, PBF enzyme, hawthorn, milk thistle, vasulin, homeopathic heart formula, CoQ10, fish oil
Vit C/E, MSM, glucose, kelp, alfalfa, various homeopathics
Vit C/E, salmon oil, digestive enzymes, blue green algae probiotics
Vit C/E, selenium, antioxidants, MSM, folic acid
Vit C/E, selenium, fish oil, fastrack
Vit C/E, selenium, kelp, flax oil, salmon oil
Vit C/E, Wysong "Call of the Wild", B vitamin
Vit C/E, zinc, cranberry, glucosamine
Vit C/E, zinc, cranberry, MSM, digestive enzymes
Vit C/E/B, kelp, flax or salmon oils
Vit C/E; fish oil
Vit C; glucosamine w/ MSM
Vit C; pet tabs
Vit E
Vit E
Vit E & selenium for seniors

Vit E, ester C, MSM, missing link, probiotics
Vit E, fish oil, MSM
Vit E, yogurt, clucosamine
Vit E,C,B; Salmon oil, garlic, faxseed, fast trac
Vit E/C, MSM, daily greens plus, fish oil
Vit E/C, probiotics
Vit E/C, zinc, "nzymes"
Vit E/C/B, lectin, alfalfa, kelp, flax seed, cod liver, salmon oil for vit A & D
Vit. C
vitamin C Bak Pac Plus
vitamin C, E B50, salmon oil, MSM
vitamins
vitamins
vitamins
vitamins, glucosamine & chond.
vitamins, glucosamine, olive oil, garlic powder
vitatabs, vitamin C and E
vits
wellness supplement, vit C/E, dry milk
wheat germ yogurt
yeast/calcium
yogurt
yogurt
yogurt for pups
yogurt, vit C, CoQ10, taurine
yogurt/prozyme

Appendix for Part 2: In some cases the number of "other" listed in the main report will be greater than the number of problems listed if respondents did not "specify" the type of other problem. The responses have been left where the respondents filled them in even if they might seem to belong in a different disease category.

Table A4: Other problems listed for Eyes and Ears

Other eye/ear disorders
3rd eyelid
allergies
bilateral corneal dystrophy
Blind
Blind from accident
blocked tear ducts
chronic ear infection
chronic ear infections
chronic eye infections
curled cartilage of nictitating membrane
detached retina & swelling
droopy eyes
droopy eyes
dry eyes
dry eyes & allergies
enopthalmos
fractured pupil/partial blindness
HAWS
ingrown lash
Near sighted
Pannus
partial blindness
Possible cherry eye
posterior lenticonas
small skin on eyeball
small tumor under 3rd eyelid
synechia
waxy build up in ear

Table A5: Other nervous system problems

Other nervous system problems
allergy to bee sting-collapsed
cracked vertebrae in neck
head shakes back and forth
lost control of urine & bowel
lost coordination in rear-erosion of sheath around nerves
occasional neck pain
occasional neck pain

pancreas shut down
poisoned by flea spray, was detoxified, never the same
slipped disc
spinal degeneration

Table A6: Other muscular and skeletal problems

Other muscle and skeleton problems
30% short femur
ACL tear; surgery
back pain
backbone bridging
blown ACL
blown cruciate ligament
bone cancer
breast cancer
calcinosis circumscipt
calcinosis circumscripta
Club foot
down on paterns
Elbow fluid (sacs)
Epiphysitis
Food - dry wheat allergy (hives)
injury crushed 2 vertebrae at head/neck
low platelets, blood clotting disorder
mastitis
megaesophagus - adult onset
missing adult tooth - never got it
missing several discs in spine
muscles on head sunk in
neck problems-slipped/pinched disk
neuropathy in spine
overbite
partial torn ligament (lft knee)
perferated lung from cyst
pinched nerve in neck
poss. torn knee ligaments
problems from dislocated hip
ruptured ACL
ruptured cruciate
Skin problems
soft tissue – shoulder
spinal injury
sudden rear paralysis
Tear of meniscus of ACL
Torn acl
Torn ACL (rt rear leg)
Torn cruciate ligament
Torn cruciate ligament

Torn cruciate ligament
Underbite
weak cruciate
weak rear

Other endocrine problems
Adult hypoglycemia
autoimmune thryroiditis
autoimmune vaccine related
Cushing syndrome
cushings
diabetes insipitus
edema
endocrine
food allergy to chicken
food allergy-chicken
inability to gain weight past 105 lbs
liver disease
overweight
pancreatitis
prostate enlargement
thyroid carcinoma

Table A7: Other endocrine problems

Other blood problems
autoimmune hemolytic
autoimmune thrombocytopenia
caught distemper in breeding from male. Lost all pups
immune system deficiency
Leukemia
penial bleeding
positive titers for RMSF
Pyometra

Table A8: Other blood problems

Table A9: Other infectious or immune problems

Other infectious or immune problems
abscessed molar

actinomycosis - 2 episodes
Allergies
allergies - hives
aspriate pneumonia
autoimmune
autoimmune
autoimmune hemolytic
autoimmune problem
blastomycosis
Bronchitis
chronic allergies
chronic urine infections
ear infections
frequent idiopathic fevers
immune system allergies/hormonal
infection from lick granuloma
kennel cough
kennel cough
kennel cough
kennel cough went to pneumonia
lime disease
liver abcess
Parvo
Pneumonia
pneumonia
recurrent ear infections
recurring sever hives
Sinus-from head injury as pup
SLE
swelling of lymph nodes from allergies
vaginal - during & before heat cycles
valley fever became autoimmune

Table A10: Other renal or urinary problems

5 mo urinary tract infection
Amyloidosis
Bladder
bladder infections
bladder infections
chronic renal failure
chronic UTI's
crystals in bladder
crystals in urine
cysteine bladder stones
difficulty urinating once catherized
dilute urine, excessive urination
Incontinence
Incontinent
kidney failure
kidney infections
kidney liver failure
kidney stones
occasional bladder leakage
puppy cystitis
renal failure

renal failure due to Addison's disease
scarred kidneys
SLE - renal disease
slight bladder infections
torsion
urinary tract infections
UTI

Table A11: Other heart problems

Other heart problems
arrythmia w/ normal echo
atrial fibrillation (7 times)
AV node block
congestive heart failure
endocarditis
enlarged heart
fatal heart attack
heart arrythmia
heart attack
heart attack
heartworm
heartworm
irregular heart beat
small heart
stroke
tachycardia
tumor grew into heart muscle
tumor on heart
valley fever = coccidiosis
very irregular heart beat; would not stabilize

Table A12: Other types of cancers

basal cell
benign tumor removed
bladder
bone infection
brain
brain
cancer of toe - amputated
cancer on arm & leg
carcinoma - uterogenic
chondrosarcoma
colon

colon cancer, melanoma of the mouth
Cushing disease
Cyst
cysts
elbow
fat cell/benign/back
Fatty tumors
Hemangiosarcoma (8 times)
intestinal
intestinal lymphoma
kidney
kidney
lipomas
Liver
Liver
Liver
lymphoma
Mast cell tumor
melanoma armpit
melanoma toe
melanoma under arm
melanosarcoma
on heart & elsewhere
Oral
oral melanoma
possible in spleen
possible liver cancer
pre-cancerous tumor on tail
prostate cancer
rt shoulder mastocytoma grade II
salivary gland
skin cancer on penis area
skin masses
small benign mass on breast
small growth on nipples
soft tissue mass filling sinus cavity
spinal tumor
spleen
spleen
stomach cancer
subcutaneous hemangiosarcoma
Testicular
testicular cancer
Thoracic
Thyroid
tumor on underside of jaw-removed
tumor w/in spinal column

Table A13: Other skin problems

Other skin problems
assorted fatty tumors
benign fatty tumor
calluses
chronic interdigital cysts
chronic interdigital cysts
chronic skin sores
cyst - early onset
cysts when older
demodex mites
Dry, flakey skin
easily sunburn on nose and scrotum
elbow irritation & swelling
elbow irritation & swelling
elbow pressure point irritation
fatty tumors
fatty tumors
fatty tumors
Follicular dermatitis
follicular hematoma
food allergy
furunculosis
grain intolerance
histiocytoma
Hot spots
Lick granuloma
loses coat in winter-can't be shown
lumps
multiple fatty cysts
patchy temp. hair loss
ringworm
sebaceous cysts
several sebaceous cysts on nipple tissue
severe lick granulosa
superficial pyoderma
testicles sensitive to sun
Warts

Table A14: Other temperament problems as reported to be problems by respondents

Other temperament problems
afraid of trains/trucks
alpha male
fear aggressivenes as blindness & deafness increased
fearful of thunderstoms after being in a tornado
hyper but sweet

manic barking for no reason
not a loner - constant attention
Protective
protective of home
pushy pup
separation anxiety
separation anxiety
separation anxiety
separation anxiety, high strung
Shy
shy around men
shy with strangers
shy, but not socialized till 2 yrs old…now fine
strange men
submissive peeing; was abused when acquired him
vocal - in wanting to communicate

Table A15: Other gastrointestinal problems

Other gastrointestinal problems
acid reflux - indigestion
Bloody diarrhea
Cancer - met. From ovaries
chronic diarrhea
chronic diarrhea
Clostridium perfringens
distended stomach & cramps (no bloat)
HEG
irritable bowel
irritable bowel disease
irritable bowel syndrome
irritated bowel syndrome
lack of appetite/chronic diahrrea
lactose intolerant
pancreas
pancreatitis
Parvo
prophylactic gastropexy
sensitive stomach
sometimes gassy
Spleen torsion
Spleen torsion
Spleen torsion & removal
spleenic torsion
splenic torsion
stomach tumor
tack intestines

tacked stomach at 1 yr
tacked stomach at 1.5 for prevention
torsed spleen
Torsion
torsion of the spleen w/o bloat
torsion w/o bloat
twisted spleen/bloating
used to vomit bile daily, now vomits food now and again; treat w/ Tagaret & Sucralfate
whipworm infection, severe
yeast in intestinal tract

Table A16: Other male specific health problems (section A)

Other male health problems
2 infections
bleeding form the penis from contact
Cryptorchid
dead sperm
decrease sperm count
fragile sperm - won't chill or freeze
had one undescended testicle prior to neuter
infection leading to decrease sperm
low libido
low sperm count
only one testicle
penial bleeding
prostate cyst
testicular degeneration
testicular infection
too small
undescended testicles
undescended testicles
undescended testicles
urinary infections
urinary tract infection

Table A17: Other female specific health problems (section B)

Other female problems
Cancer
chronic discharge
chronic discharge & infections
chronic discharge & infections
compromised uterus
cyst on ovary
Cysts in uterus
do not breed due to blood disorder
endometreosis
failure to tie dog bred by implant
False pregnancies
False pregnancies
fetal resorption
found to be displastic by x ray at 2 yr
Heart murmur, not breedable
Large tumor
low progesterone levels during pregnancy
Mastitis

mastitis from false pregnancy
mastitis; cysts & growths
milk cysts
mycoplasma
ovaries caudally located, intermitant hyperplasia uterus
retained placenta on 1 breeding
split heat
timing
unable to carry litter to term
uterine ertia
uterine herpes
vaginal discharge/vaginitis
vaginitis after every heat

Table A18: Other puppy problems (section C)

Other puppy problems
2 osteosarcoma, 1 mouth cancer
abnormality of feet - webbed
albino-not deaf, blue merle-kinked tail, 2 harlequin-
all pups were premature possibly due to beta strep infection
anemia; ruptured umbilical cord
Aneurysm
approx 6 puppies in 1st litter were not saved (placenta separation)
Autism
blind cloaca
Bloat
bloat w/torsion; upper respiratory failure
brain tumor
Cataracts
cherry eye
cherry eye, umbilical hernia
deaf & blind in one eye
deaf puppy
deformed front leg
diaphramatic hernia - died under anesthesia for ear crop
died accidentally
dome head
Dysplasia
Ectropion
entropion - 2 CD litter all 7 puppies
eye defect
failed OFA certification
failure to thrive, eye defects
hare lip; split nose
heart disease
heart murmer, cancer

hip dysplasia
hip dysplasia
hip dysplasia; cause of hereditary dz uknown; some kind of blood disorder
HOD
HOD
HOD; knees
inflammatory bowel disease: 2 euthanized, 2-treated, living
inguinal hernias, eye defects
inoperable hernia in diaphragm area
intussception
juv. Cataracts
juvenile cataract
liver shunt
liver shunt euth at 6mo.
Male - immature development
Male formed with malformed feet
minor heart murmer
monorchid
myelopathy, outgrown by 8 weeks
not completely developed
OCD, bloat
OCD, immune problems, overbite
one small umbilical hernia which closed spontaneously by 3 mo
overbite
Pano
Pano, cryptorchids
portal systemic shunt-corrective surgery, followed by GI ulcers/bleed; surgical intervention; exsanguinated 3 wks later
Pups didn't survive after c-section
Renal dysplasia, eye defects
Renal failure/does not appear to be dysplasia; kidneys appear normal
seizure disorder
seizures
she killed them by laying on them
Skull not completely closed - hole in top
smothered
still birth & other pup died of respiratory failure
thoracic vertebrae deformed
Toxic & faded
twisted toe required surgery
vaccinosis
very bad skin problems (same litter as megaesophagus)
very small kidneys (euth. @ 12 wks.)
was strong, but very small so vet put down
White - put down at birth
White or light; deaf &/or blind
White, put down at birth