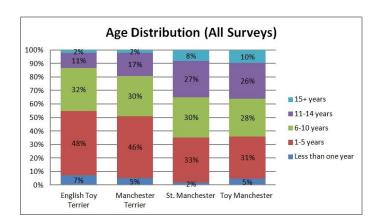
2018 General Health Survey

English Toy Terrier Summary

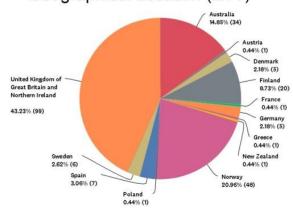
From February 1 – March 31, 2018, the Canadian and American Manchester Terrier Clubs administered a comprehensive online health survey of Manchester Terrier, Toy Manchester Terrier and English Toy Terrier owners and breeders. A total of 1,171 surveys were completed, including 229 surveys from English Toy Terrier owners.

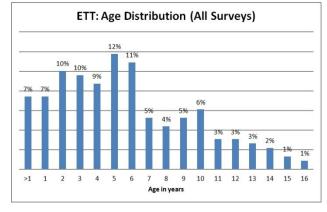
Demographics

- 48% of dogs reported on were male and 52% female.
- Most owners came from the United Kingdom (43%) followed by Norway (21%) and Australia (15%).
- 54% of surveys were completed by Pet/Companion owners and 46% were completed by Breeders/Exhibitors.
- The ETT sample was relatively young, with a median age of just five years and only 10% of dogs reported aged 11 years or above.



Geographical Location (ETT)





Longevity and Cause of Death

- Information on longevity and cause of death should be reviewed with caution as only 11% of English Toy Terriers reported on were deceased.
- Median age at death was 12 years among all ETTs.
- On average, females lived one year longer than males.
- "Old Age" was the most common cause of death cited by owners among all reported deaths.
- The number of deaths reported in dogs less than 10 years of age was too small to provide a statistically relevant sample.

ETT: Age at Death 4.5 4 3.5 3 2.5 2 1.5 1 0.5 2 3 7 8 9 10 11 12 Age in Years



		Car	uses of D	eath (All D	eaths)		
English Toy Terrier (25)		Manchester Terrier (90)		Standard Manchester (45)		Toy Manchester (71)	
1. "Old Age"	8 (32%)	1. "Old Age"	19 (21%)	1. Cancer	10 (22%)	1. Cancer	13 (18%)
2. Accident	3 (12%)	2. Kidney	18 (20%)	2. Heart Issue	7 (15.5%)	2. Kidney Issue 2. "Old Age"	11 (15%)
3. Cancer 3. Heart (murmur/valve)	2 (8%)	3. Cancer	15 (17%)	3. "Old Age"	6 (13%)	3. Accident 3. Digestive Issue 3. Congestive Heart Failure	5 (7%)
			Deaths at ag	e 11 years or abov	ve		
13 (52%)		48 (53%)		29 (64%)		43 (61%)	

		Causes	of Deatl	n (Age 10 an	d under)		
English Toy Terrier (11*)		Manchester Terrier (42)		Standard Manchester (16*)		Toy Manchester (29)	
1. Accident 1. Cancer	2	1. Kidney Issue	13 (31%)	1. Accident 1. Cancer	4	1. Digestive Issue 1. Kidney Issue	6 (21%)
		2. Accident	8 (19%)	2. Heart Issue	3	2. Cancer	5 (17%)
		3. Cancer/Tumor	7 (17%)			3.Accident 3. JDCM	3 (10%)

^{*}Not a statistically significant population sample

Highlights

Most Common Diseases/Disease Groups			Most Common Non-Infectious Conditions				
1.	Luxated Patella	7.9%	1.	Removal of teeth as a result of poor oral health	17.5% [@]		
2.	Cataracts	7.4%	2.	Alopecia - Pattern Baldness	7.9%		
3.	Heart Murmur	$3.9\%^{@}$	3.	Impacted Anal Glands	6.6%		
4.	Cancer (all types)	3.5% [@]		Demodex – Puppy	6.6%		
5.	Bilious Vomiting Syndrome	2.6%	4.	Alopecia – Seasonal	5.2%		
	Colitis	2.6%	5.	Misaligned bite: Undershot	4.8%		
	Seizure	2.6%	6.	Atopic Dermatitis	3.5%		
6.	Chronic Diarrhea	1.8%		Dental Abscess	3.5%		
	Hemorrhagic Gastroenteritis	1.8%		Demodex – Localized	3.5%		
	Irritable Bowel Disease	1.8%		Food Allergy	3.5%		
7.	Epilepsy	1.3%	7.	Eye/Sight changes related to advanced age	3.1% [@]		
			8.	Vaccination Allergies	2.6%		
			9.	Arthritis	$2.2\%^{@}$		
				Coprophagia	2.2%		
				Deafness related to advanced age	2.2%		

Age-Related Issues ([®])

- In considering statistics for age-related issues, note that the median age of all English Toy Terriers surveyed was just 5 years old, meaning fully half of the dogs reported on were aged 5 years or less.
- 17.5% of English Toy Terrier owners reported poor oral health in their dogs.
 - Up to 1/3 of ETTs required extractions or had abscesses by 6-10 years of age
 - More than 2/3s had serious dental health issues by 11+ years of age
- Eye/sight changes related to advanced age were reported in 3.1% of ETTs. Median age of onset was 12 years.
- Deafness related to advanced age was reported in 2.2% of ETTs, with a median age of onset of 12 years.
- Cancer (all types) affected 3.5% of ETTs. While information on age of onset was not specifically gathered, circumstantial indicators provide strong evidence that cancer was generally more common in older dogs.
- Survey data indicates that arthritis is an issue most commonly found in older dogs.



Luxated Patella

- Luxated Patella was the second most common physical condition reported by English Toy Terrier owners, behind only "Removal of teeth resulting from poor oral health."
- Most cases of luxated patella were reported by pet owners.
- Information on grade of luxation, symptoms and/or effect on quality of life was not collected in this survey.

Cataract

- Cataracts were the fourth most common health-related condition reported among ETTs in the survey.
- A higher incidence of cataracts in younger ETTs as compared to other breeds/varieties surveyed may reflect greater testing, as eye testing/screening is widely practiced by English Toy Terrier breeders/exhibitors.
- As respondents who completed the survey were not asked whether testing was associated with clearances or in response to observed symptoms, it is impossible to measure the impact of eye issues on quality of life.

Skin

- Almost 22% of ETT owners reported a condition in the skin category.
- Five of the most common issues in English Toy Terriers came from the skin category:
 - Demodex puppy (7.9%)
 - o Pattern Baldness (6.6%)
 - Seasonal Alopecia (5.2%)
 - Atopic Dermatitis (3.5%), and
 Demodex Localized (3.5%)
- Altogether, 12% of ETT owners reported a condition in the Alopecia (hair loss) family.
- Reports of demodex were elevated among English Toy Terriers as compared to other breeds or varieties examined in this survey.

Digestion/Gastroenterology

- More than 15% of ETT owners reported a condition in the digestion/gastroenterology category.
- Six of the most common issues in ETTs came from this category, including:
 - Impacted Anal Glands (6.6%)
 - Bilious Vomiting Syndrome (2.6%)
 Colitis (2.6%)
 - Chronic Diarrhea (1.8%);
 Hemorrhagic Gastroenteritis (1.8%), and
 Irritable Bowel Disease (1.8%)
- Both Colitis and Hemorrhagic Gastroenteritis were reported twice as often by ETT owners than other breeds/varieties in this survey
- Impacted anal glands were reported more often in females than males.

Temperament and Behaviour

- The behaviours most often reported by ETT owners in this category were aggression toward other dogs, excessive barking and separation anxiety.
- More than 46% of ETT companion owners reported at least one of the behaviours listed and were 4x more likely to report almost all of the behaviours listed in the survey than breeder/exhibitors.



Miscellaneous

- A heart issue of some type was reported in 7% of ETTs, with heart murmurs being the most common condition. The sample size was too small to determine age of onset or impact on length of life.
- Food allergies/sensitivities were reported in 3.5% of English Toy Terriers, however the survey did not collect sufficient data to indicate what the dogs were allergic to or what symptoms they exhibited.
- 2.6% of English Toy Terrier owners reported that their dog had had at least one seizure and half of those dogs were affected between 18 weeks and 7 years of age. Epilepsy was cited as the cause in only one case.
- 2.6% of ETT owners reported a vaccination allergy or reaction. Insufficient information was collected to determine which vaccines were most often involved.
- Owners observed false pregnancies among 13% of ETT females who were not spayed before 6 months of age.

Follow-up Action

The general health survey provides sound baseline data, however in many areas it does not provide enough detail to help breeders and owners understand, prevent or treat conditions. As a result, breed clubs may wish to consider additional research into areas where the survey either identified possible areas of concern or where more information is needed/would be helpful. In English Toy Terriers, these include investigation of:

1) Quality of Life – Patellas and Cataracts

Luxated Patellas and Cataracts were two of the most commonly reported issues in this survey for English Toy Terriers. Elevated rates of these two conditions may reflect greater awareness among breeders and, as a result, wider testing for breeding stock. What is unclear, though, is what impact these two conditions have on the dogs themselves and when/if symptoms appear.

 Additional surveying on these two important issues may reveal important information on things like impact on quality of life, age of onset and the need for/success of treatments.

2) Dental Health

More than 66% of ETT owners reported extractions/abscesses requiring veterinary treatment by 11+ years of age.

- Breed clubs should undertake a sustained public education campaign aimed at encouraging positive dental health habits among owners.
- When selling puppies, breeders must underline the importance of dental health as part of regular grooming.

3) Temperament and Behaviour

Survey results indicate that ETT companion owners are challenged by some common behaviours.

- Breed clubs should consider results in this section carefully and explore ways to help new owners avoid common issues, support those currently dealing with challenges and encourage best practices among breeders.
- Breeders also have a key role to play in providing stimulating neonatal environments and training, educating and assisting new owners, and considering temperament as a key factor in planning breedings.



4) Mortality and Health Surveillance

With a median age of just 5, the population reported on in this survey was relatively young and the proportion of deceased dogs was low at just 10%, meaning insight into the health of ETTs later in life was very limited.

- An ongoing open survey should be created and continually promoted by ETT clubs and breeders to assist in
 ongoing surveillance of age at and cause of death. This project could be undertaken in partnership with other
 breeds/varieties surveyed.
- ETT clubs may wish to consider repeating this survey (or a similar model) in five years, rather than waiting for a longer interval. Results from this first attempt may encourage greater participation, providing better and more representative results.

5) Gastrointestinal Issues

Six of the most common issues in ETTs came from the digestion/gastrointestinal category, which also proved to be an area of concern for other breeds/varieties surveyed.

- Additional surveying may reveal important information on how and when issues develop, severity, common triggers, and the possible relationship between gastrointestinal, kidney and liver issues identified in the survey.
- Breeder and owner support of the <u>AMTC/CMTC study into protein-losing digestive and kidney diseases</u> at the
 University of Minnesota is also important. All owners should know the symptoms described and the study team
 should be consulted on all possible cases.

Across all breeds/varieties examined in this survey, additional study may also be warranted with regard to:

- a) **Allergies**, including identification of common allergens and symptoms. The survey did not collect sufficient information to provide meaningful insight into the nature of food or environmental allergies experienced.
- b) Given the relatively consistent reports of **heart murmurs** across all breeds/varieties surveyed, breeders may wish to explore this condition in more detail, beginning with determination of age of onset and impact on quality of life.

