

2018 General Health Survey

Toy Manchester Terrier Summary

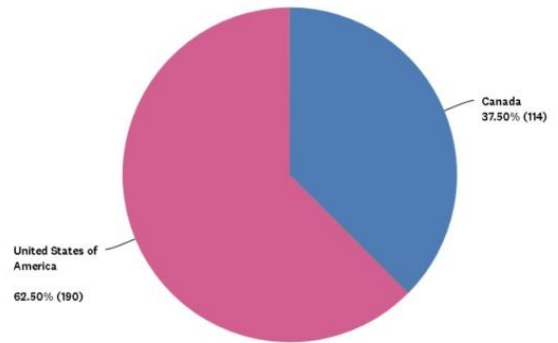
From February 1 – March 31, 2018, the Canadian and American Manchester Terrier Clubs administered a comprehensive online health survey of Manchester Terrier, Toy Manchester Terrier and English Toy Terrier owners and breeders. A total of 1,171 surveys were completed, including 304 surveys from Toy Manchester Terrier owners.

A comprehensive analysis of the entire survey can be found on the [Canadian Manchester Terrier Club website](#).

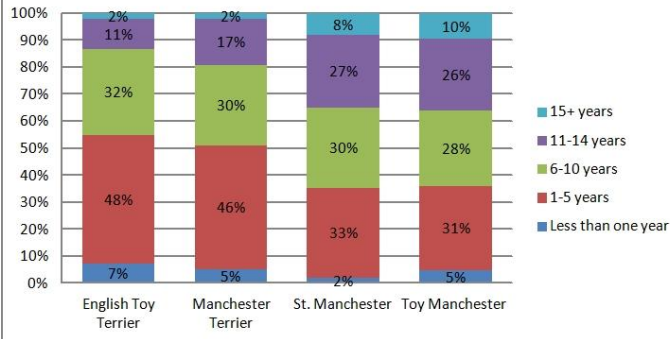
Demographics

- 46% of surveys were completed by Pet/Companion owners and 54% were completed by Breeders/Exhibitors.
- 42% of dogs reported on were male and 58% female.
- The median age of all Toy Manchester Terriers reported on in the survey was 8 years.
- 35% of Toy Manchesters reported on in the survey were aged 11 years or above.

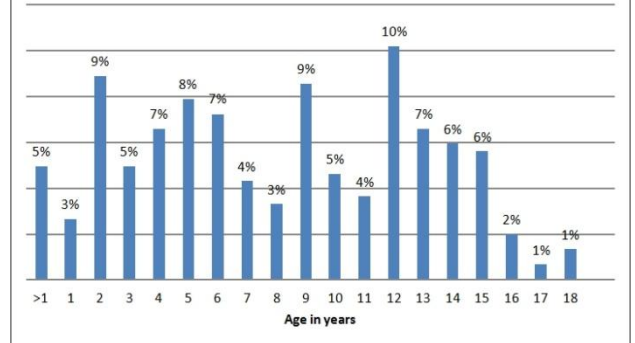
Geographical Location (TMT)



Age Distribution (All Surveys)



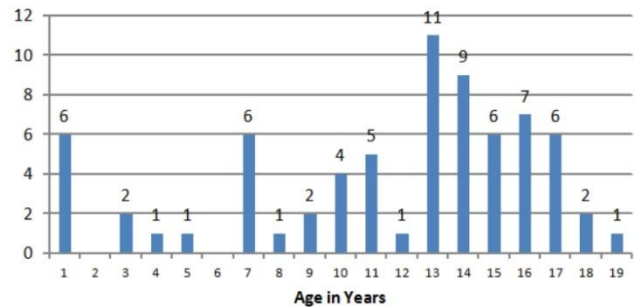
TMT: Age Distribution (All Surveys)



Longevity and Cause of Death

- 23% of TMTs reported on were deceased.
- Median age at death was 12 years.
- On average, females lived one year longer than males.
- Cancer was the most common cause of death cited by owners in all reported deaths.
- Digestive and kidney issues tied as the top cause of death in Toy Manchesters who were less than 10 years old when they died.

TMT: Age at Death



Causes of Death (All Deaths)							
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	11 (15%)
3. Cancer	2 (8%)	3. Cancer	15 (17%)	3. "Old Age"	6 (13%)	2. "Old Age"	
3. Heart (murmur/valve)						3. Accident	5 (7%)
						3. Digestive Issue	
						3. Congestive Heart Failure	
Deaths at age 11 years or above							
13 (52%)		48 (53%)		29 (64%)		43 (61%)	

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

*Not a statistically significant population sample

Highlights

Most Common Diseases/Disease Groups	Most Common Non-Infectious Conditions
1) Cataracts 10.5% [@]	1) Removal of teeth as a result of poor oral health 33% [@]
2) Cancer (all types) 8% [@]	2) Alopecia - Pattern Baldness 14.1%
3) Heart Murmur 6.6% [@]	3) Deafness related to advanced age 12.5% [@]
4) Chronic Diarrhea 5.3%	Eye/Sight changes related to advanced age 8.6% [@]
5) Kidney Disease (Amyloidosis, Renal Failure or Glomerulonephritis) 5%	4) Arthritis 7.6% [@]
6) Bilious Vomiting Syndrome 4.9%	5) Dental Abscess 5.3%
7) Intestinal Lymphangiectasia 2.6%	6) Alopecia - Seasonal 4%
Irritable Bowel Disease 2.6%	7) Food Allergy 3.9%
Pancreatitis 2.6%	8) Coprophagia 3.6%
8) Persistent Pupillary Membrane 2.3%	9) Atopic Dermatitis 3.6%
9) Chronic/Congestive Heart Failure 2% [@]	Vaccination Allergies 3.3%
Legg-Calve-Perthes Disease 2%	10) Sebaceous Cysts
Seizures 2%	

Age-Related Issues [@]

- 33% of Toy Manchester owners reported poor oral health in their dogs.
 - Up to 1/3 of TMTs 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
- Both deafness related to advanced age and eye/sight changes related to advanced age were reported in 12.5% of all TMTs. Median age of onset for both was 12 years.
- Median age of onset for cataracts in Toy Manchesters was 11 years old, with eye sight changes related to age accounting for at least half of all reported cases of cataracts. Survey data also indicates that arthritis and heart murmurs are issues most commonly found in older dogs.



- Cancer (all types) affected 8% of Toy Manchesters. While information on age of onset was not specifically gathered, circumstantial indicators provide strong evidence that cancer was more commonly seen in older dogs.

Digestion/Gastroenterology

- Almost 25% of TMT owners reported a condition in the digestion/gastroenterology category.
- Top reported health issues in this category were:
 - Chronic Diarrhea (5.3%);
 - Bilious Vomiting Syndrome (4.9%);
 - Intestinal Lymphangiectasia (2.6%)
 - Irritable Bowel Disease (2.6%); and
 - Pancreatitis (2.6%)
- Chronic diarrhea was reported almost 3x more among TMTs than other breeds/varieties in this survey
- Protein-losing enteropathy was almost exclusively reported in Toy and Standard Manchesters and Intestinal Lymphangiectasia was only reported in TMTs
- Several Toy Manchester owners reported dogs with concurrent digestive and kidney diseases (and perhaps elevated liver enzymes). The possibility of a link between these conditions was further strengthened when results in other breeds/varieties examined in the survey were considered.

Kidney/Urinary

- Of concern in the kidney section is the presence of a group of dogs seemingly affected by serious kidney disease at a relatively young age.
- If the conditions of amyloidosis, chronic or acute renal failure and glomerulonephritis are considered together, some 2.5% of TMTs reported on in the survey were affected by serious kidney disease before age 10.
- See note above re: possible relationship to digestive and liver findings.
- Many kidney issues were not specifically attributed to a disease process but rather to general "kidney failure". Increased investigation by breeders/owners, including necropsies of deceased dogs, is highly recommended.

Skin

- Three of the most common issues in Toy Manchesters came from the skin category: Pattern Baldness, Seasonal Alopecia, and Atopic Dermatitis (itchy skin).
- Altogether, 18% of TMT owners reported a condition in the Alopecia (hair loss) family.
- Companion owners were 3x more likely to report Pattern Baldness than breeders/exhibitors.

Temperament and Behaviour

- The behaviours most often reported by TMT owners in this category were separation anxiety, aggression toward other dogs and excessive barking.
- More than 50% of companion owners reported at least one of the seven behaviours listed. Companion owners were also 10x more likely to report separation anxiety in their Toy Manchester than breeder/exhibitors.

Miscellaneous

- 3.6% of TMT owners reported a vaccination allergy or reaction. Although not all owners identified the type of vaccination that caused a reaction, among those who did the rabies vaccine was most commonly cited.
- Food allergies/sensitivities were reported in 4% of Toy Manchesters, however the survey did not collect sufficient data to indicate what the dogs were allergic to or what symptoms they exhibited.



- Owners observed false pregnancies among 5.6% of Toy Manchester females who were not spayed before 6 months of age.
- Reports in 2018 of both Legg-Calve-Perthes Disease (1.6%) and Hypothyroid (2.6%) remained consistent for Toy Manchesters with 2002 rates reported for the combined Toy and Standard Manchester population.

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 Toy Manchesters, these include investigation of:

1) **Gastrointestinal and Kidney Issues**

Digestive and kidney problems were the #1 causes of death in Toy Manchesters under age 10. Additionally, digestive issues were reported by some 23% of all TMT owners.

- 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 [AMTC/CMTC study into protein-losing digestive and kidney diseases](#) 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. Breeders and breed clubs must ensure pet owners are aware of this study as, because these issues do not usually appear in puppies or adolescents, owner awareness is key to collection of information.

2) **Dental Health**

More than 66% of TMT 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 TMT 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**

Causes of and age at death can provide important information and is easy to collect.

- An ongoing open survey should be created and continually promoted by Manchester 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.

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

- a) To provide a basis for comparison, breed clubs may wish to **compare rates** of prominent conditions/conditions of interest to results from surveys conducted for other breeds.



- b) **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.
- c) If additional surveying on **eye conditions** is pursued, an effort should be made to distinguish between age at diagnosis and age at which symptoms are observed for cataracts in Toy Manchesters. Review of eye testing results from kennel club and health registry databases like CERF is also recommended.
- d) 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.

