

2018 General Health Survey

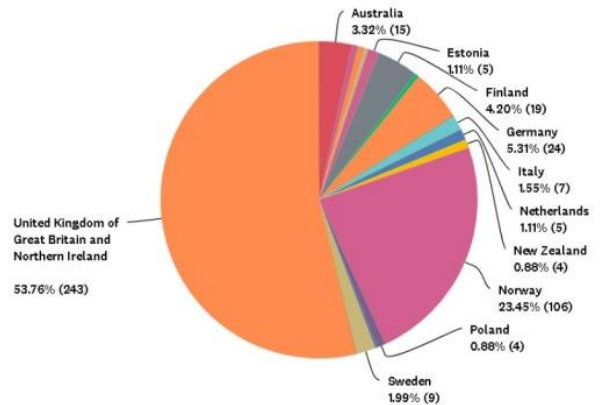
Manchester Terrier (UK/FCI) Summary

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 452 surveys from Manchester Terrier owners outside North America.

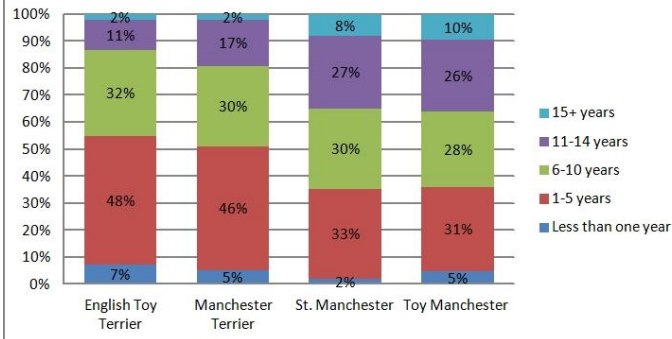
Demographics

- 44% of dogs reported on were male and 56% female.
- Most owners came from the United Kingdom (54%) followed by Norway (23%).
- 57% of surveys were completed by Pet/Companion owners and 43% were completed by Breeders/Exhibitors.
- The median age of all Manchester Terriers reported on in the survey was 5 years.
- 19% of Manchesters reported on in the survey were aged 11 years or above.

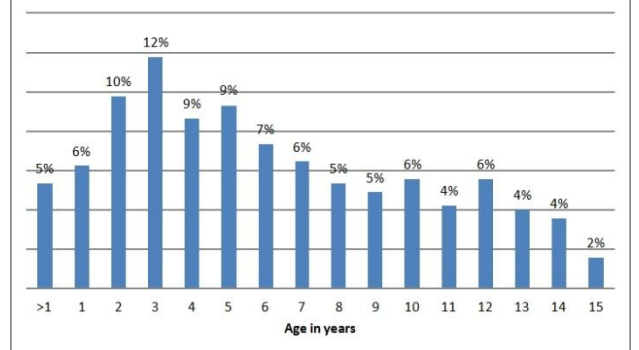
Geographical Location (MT)



Age Distribution (All Surveys)



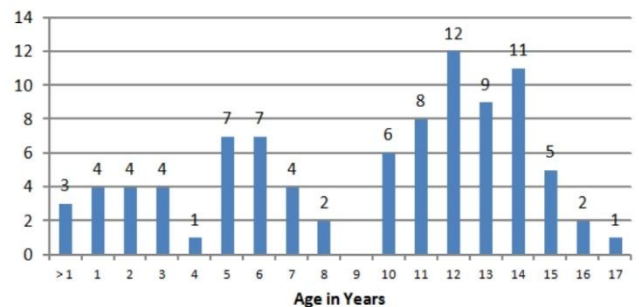
MT: Age Distribution (All Surveys)



Longevity and Cause of Death

- 20% of Manchesters reported on were deceased.
- Median age at death was 11 years among all MTs.
- 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.
- Kidney issues were the top cause of death in Manchester Terriers who were less than 10 years old when they died.

MT (UK/FCI): 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) Cancer (all types)	6.6% [@]	1) Impacted Anal Glands	16.8%
2) Heart Murmur	4.4% [@]	2) Alopecia - Pattern Baldness	7%
Kidney Disease (Amyloidosis, Renal Failure or Glomerulonephritis)	4.4%	3) Removal of teeth as a result of poor oral health	5.1% [@]
3) Cataracts	3.3% [@]	4) Deafness related to advanced age	4.4% [@]
4) Pancreatitis	3.1%	5) Food Allergy	4%
5) Bilious Vomiting Syndrome	2.7%	6) Alopecia – Seasonal	3.5%
6) Glaucoma	1.3% [@]	7) Eye/Sight changes related to advanced age	3.3% [@]
Luxated Patella	1.3%	8) Coprophagia	2.9%
7) Hypothyroid	1.1%	9) Arthritis	2.7% [@]
8) Arrhythmia	0.9%	10) Deafness not related to age	2.4%
9) Autoimmune Hemolytic Anemia	0.7%	Umbilical Hernia	2.4%
		Atopic Dermatitis	2.4%
		Sebaceous Cysts	2.4%

Age-Related Issues [@]

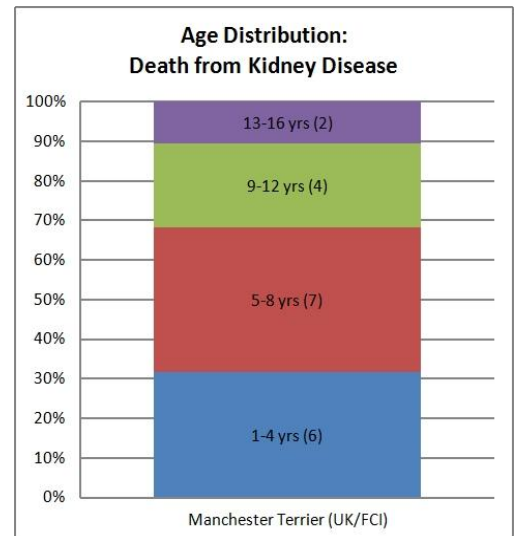
- In considering statistics for age-related issues, note that the median age of all Manchester Terriers (UK/FCI) surveyed was just 5 years old, meaning fully half of the dogs reported on were aged 5 years or less.
- A heart issue of some type was reported in almost 8% of Manchester Terriers (UK/FCI), 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.
- 5% of Manchester owners reported poor oral health in their dogs.
 - 8% of Manchesters required extractions or had abscesses by 6-10 years of age
 - Almost 15% had serious dental health issues by 11+ years of age
- Deafness related to advanced age was reported in almost 4.4% of MTs, with a median age of onset of 12 years.
- Eye/sight changes related to advanced age were reported in 3.3% of MTs. Median age of onset was 11 years. Advanced age was also associated with most cases of glaucoma.



- Survey data indicates that arthritis is an issue most commonly found in older dogs.
- Cancer (all types) affected 6.6% of 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, with the exception of lymphoma.

Kidney/Urinary

- Kidney disease was the leading cause of death in Manchester Terriers (UK/FCI) behind the generalized term 'old age', and was the #1 cause of death in dogs less than 10 years old. Among all dogs that died of kidney issues, median age at death was just 5 years old.
- 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 3% of Manchesters reported on in the survey were affected by serious kidney disease before age 7.
- Several Manchester Terrier 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.
- 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.



Digestion/Gastroenterology

- More than 28% of Manchester owners reported a condition in the digestion/gastroenterology category.
- Top reported health issues in this category were:
 - Impacted Anal Glands (16.6%);
 - Pancreatitis (3.1%); and,
 - Bilious Vomiting Syndrome (2.7%).
- Reports of impacted anal glands were 10-15% higher in Manchester Terriers (UK/FCI) than English Toy Terriers or Toy Manchester Terriers and were more common in females than males.
- See note above re: possible relationship to kidney and liver findings.

Temperament and Behaviour

- The behaviours most often reported by Manchester owners in this category were aggression toward other dogs, separation anxiety and excessive barking.
- More than 50% of companion owners reported at least one of the behaviours listed in the survey and were up to 5x more likely to report issues than breeder/exhibitors.

Skin

- Three of the most commonly reported issues in Manchester Terriers (UK/FCI) came from the skin category: Pattern Baldness, Seasonal Alopecia, and Atopic Dermatitis (itchy skin).
- Altogether, 9% of MT owners reported a condition in the Alopecia (hair loss) family
 - owners of males were almost twice as likely to report a condition in this family as owners of females.
 - companion owners were 18x more likely to report Pattern Baldness than breeders/exhibitors.



Miscellaneous

- According to the American Kennel Club, the average lifespan of medium-sized dogs is 10-13 years. At 9.6 years, average age of death in Manchester Terriers (UK/FCI) is slightly below this range and is also 1.5 - 2 years lower than all other varieties/groups examined in this survey.
- Manchester Terriers (UK/FCI) may be affected by cancer/tumor at a slightly younger age than other breeds/varieties examined in this survey. This difference is heavily influenced by the younger age at death from lymphoma observed in Manchester Terriers (UK/FCI) where all four cases reported were fatal in dogs aged 5-7 years.
- Food allergies/sensitivities were reported in 4% of Manchesters, however the survey did not collect sufficient data to indicate what the dogs were allergic to or what symptoms they exhibited.
- 2.4% of owners reported their Manchester Terriers were affected by bilateral or unilateral hearing loss not associated with age. Data provided confirms that at least half were affected at less than seven, with several diagnosed at 4-6 weeks of age.
- Conjunctivitis was reported at slightly elevated rates in the Manchester Terrier (UK/FCI) population with 4% of owners reporting at least one eye infection during their dog's lifetime. Keratoconjunctivitis Sicca (dry eye) reports were also slightly elevated compared to other breed populations examined in the survey.
- Owners observed false pregnancies in almost 24% of Manchester 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 Manchester Terriers (UK/FCI), these include investigation of:

1) **Kidney Issues**

Kidney problems were the #1 cause of death in Manchesters under age 10.

- 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 extremely 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) **Mortality Surveillance**

At 9.6 years, average age at death of Manchester Terriers (UK/FCI) was 1.5-2 years lower than other similar breeds/varieties examined in this survey.

- 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.
- Cancer/tumor rates, age of onset and mortality in Manchester Terriers (UK/FCI) may warrant additional monitoring and/or investigation.



3) **Temperament and Behaviour**

Survey results indicate that MT 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, as well as considering temperament as a key factor in planning breedings.

4) **Digestion/Gastroenterology Issues**

Digestive issues were reported by more than 28% of all MT owners

- Impacted anal glands were observed in almost 17% of Manchester Terriers (UK/FCI) and were the most commonly reported health issue reported. More research should be undertaken to understand potential causes, treatments and preventive measures.
- Elevated levels of pancreatitis and episodes of vomiting bile were reported in MTs. Additionally, 4% of owners reported food allergies, though it is unclear if these resulted in digestive or skin disturbances. Continued surveillance of gastric disturbances and their causes, relationship to other issues (i.e., kidney, liver, skin, etc.) is recommended (see note above about the [AMTC/CMTC study into protein-losing digestive and kidney diseases](#)).

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.
- c) All breed clubs should undertake a sustained public education campaign aimed at encouraging positive **dental health** habits among owners.

