

2018 General Health Survey

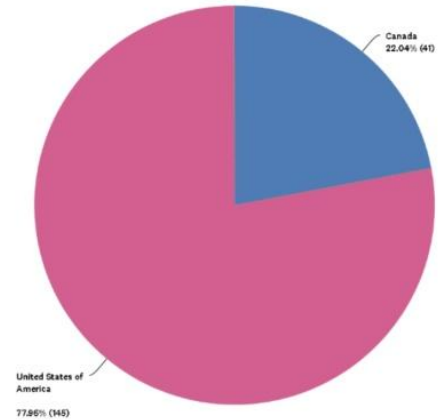
Standard Manchester Terrier Summary

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 186 surveys from Standard Manchester Terrier owners.

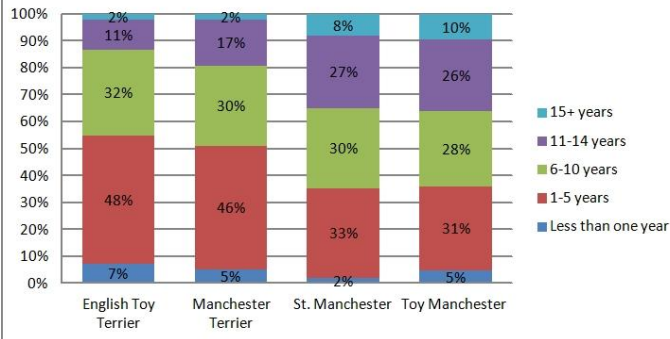
Demographics

- 49% of surveys were completed by Pet/Companion owners and 51% were completed by Breeders/Exhibitors.
- 51% of dogs reported on were male and 49% female.
- The median age of all Standard Manchester Terriers reported on in the survey was 8 years.
- 34% of Standard Manchesters reported on in the survey were aged 11 years or above.

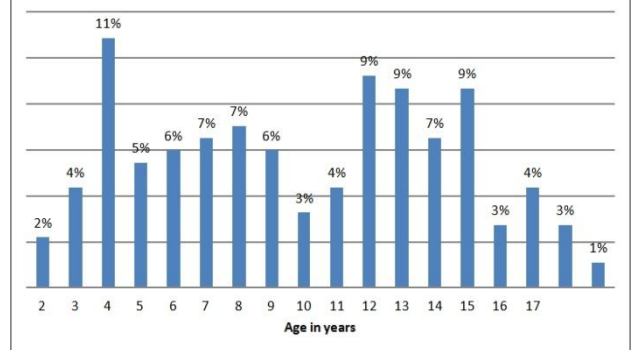
Geographical Location (SMT)



Age Distribution (All Surveys)



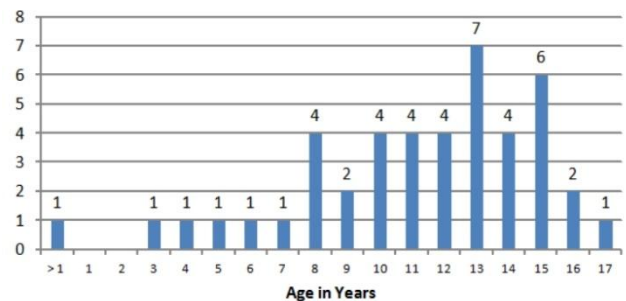
SMT: Age Distribution (All Surveys)



Longevity and Cause of Death

- 24% of SMTs reported on were deceased.
- Median age at death was 12.5 years.
- There was no significant difference in lifespan by sex.
- Cancer was the most common cause of death cited by owners in 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.

SMT: 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"	5 (7%)	
3. Heart (murmur/valve)						3. Accident		
						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				1. Cancer		1. Kidney Issue	
		2. Accident	8 (19%)	2. Heart Issue	3	2. Cancer	5 (17%)
		3. Cancer/Tumor	7 (17%)			3. Accident	3 (10%)
						3. JDCM	

*Not a statistically significant population sample

Standard Manchester Terrier

Most Common Diseases/Disease Groups		Most Common Non-Infectious Conditions	
1) Bilious Vomiting Syndrome	12.9%	1) Removal of teeth as a result of poor oral health	15% [@]
2) Cataracts	11.8% [@]	2) Eye/Sight changes related to advanced age	11.3% [@]
3) Cancer (all types)	8.6% [@]	3) Arthritis	9.7% [@]
4) Heart Murmur	7% [@]	Impacted Anal Glands	9.7%
5) Hypothyroid	5.4%	4) Alopecia - Pattern Baldness	7%
6) Ataxia (all types)	4.8%	5) Coprophagia	5.4%
Kidney Disease (Amyloidosis, Renal Failure or Glomerulonephritis)	4.8%	6) Deafness related to advanced age	4.8% [@]
Pancreatitis	4.8%	7) Dental Abscess	4.3% [@]
7) Irritable Bowel Disease	4.3%	Food Allergy	4.3%
8) Seizures	3.8%	8) Alopecia – Seasonal	3.8%
9) Chronic/Congestive Heart Failure	2.2% [@]	9) Atopic Dermatitis	3.2%
Colitis	2.2%	Vaccination Allergies	3.2%
Cushing's Disease	2.2%	10) Chronic Ear Infections	2.7%
Luxated Patella	2.2%	Incontinence	2.7%
		Sebaceous Cysts	2.7%

Age-Related Issues ([@])

- 15% of Standard Manchester owners reported poor oral health in their dogs.
 - 5% of SMTs required extractions or had abscesses by 6-10 years of age
 - Almost 40% had serious dental health issues by 11+ years of age
- Eye/sight changes related to advanced age were reported in 11.3% of all SMTs. Median age of onset was 11 years.
- Deafness related to advanced age was reported in almost 5% of SMTs, with a media age of onset of 12 years.
- Median age of onset for cataracts in Standard Manchesters was 10 years old and survey data also indicates that arthritis and heart murmurs are issues most commonly found in older dogs.
- Cancer (all types) affected 8.6% of Standard 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

- 28% of SMT owners reported a condition in the digestion/gastroenterology category.
- Top reported health issues in this category were:
 - Biliious Vomiting Syndrome (12.9%);
 - Impacted Anal Glands (9.7%);
 - Pancreatitis (4.8%);
 - Irritable Bowel Disease (4.3%); and
 - Colitis (2.3%)
- Standard Manchester owners were 2.5-5x more likely to report Biliious Vomiting Syndrome, 2x more likely to report Irritable Bowel Disease; and, reported the highest proportional rate of Pancreatitis compared to other breeds/varieties in this survey.
- Impacted anal glands were more common in females than males, both in SMTs and across all breeds surveyed.
- Several Standard 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 2.7% of SMTs 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.

Neurology

- Conditions relating to loss of coordination (ataxia, degenerative myelopathy and polymyositis) were reported by 6% of all Standard Manchester owners surveyed.
 - Ataxia with unknown cause (2.7%) and Cerebellar Ataxia (2.2%) were the most common.
 - 2/3s of these Standard Manchesters were diagnosed at less than 7 years of age.
- More than half of seizures reported were attributed to old age or were secondary to another health condition.

Temperament and Behaviour

- The behaviours most often reported by SMT owners in this category were separation anxiety, aggression toward other dogs and excessive barking.
- More than 60% of companion owners reported at least one of the seven behaviours listed.
- Companion owners were also 3x more likely to report behaviours in almost every category and 4x more likely to report excessive barking in their Standard Manchester than breeder/exhibitors.

Miscellaneous

- 7% of Standard Manchester Terrier owners reported a condition in the Alopecia family, with companion owners more than twice as likely (12%) to report a hair loss condition as breeders/exhibitors (5%).
- Legg-Calve-Perthes Disease and Luxated Patella have traditionally been considered issues more common in Toy Manchesters than Standard Manchesters; however both were reported by Standard Manchester owners. In fact, Luxated Patella was reported by a higher proportion of Standard owners (2.2% than Toy owners (1.6%).
- 5.4% of Standard Manchester owners reported that their dog was hypothyroid. This may represent an increase compared to the 2002 survey, when the rate was 2.6% in the combined Toy and Standard population.



- Food allergies/sensitivities were reported in 4.3% of Standard Manchesters, however the survey did not collect sufficient data to indicate what the dogs were allergic to or what symptoms they exhibited.
- 3.6% of SMT 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.
- Owners observed false pregnancies among 16.1% of Standard 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 Standard Manchesters, these include investigation of:

1) Gastrointestinal Issues

Digestive issues were reported by almost 30% of all SMT owners. Additionally, impacted anal glands were reported at a remarkably high rate.

- 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.
- Investigation of impacted anal glands, potential causes and prevention should be undertaken.

2) Neurological Issues

A noteworthy cohort of Standard Manchester Terriers were affected at a young age by conditions characterized by motor coordination deficits.

- Breeders may wish to conduct additional surveying and learning activities to explore the associated family of diseases and/or causes of reported symptoms to determine whether commonalities exist.
- When selling puppies, breeders must underline the importance of dental health as part of regular grooming.

3) Temperament and Behaviour

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

