



Morris Animal Foundation is pleased to share the results of a recently conducted guide dog health survey. The information provides a snapshot of the current status of the guide dog population in the United States. As the first study of its kind, the research provides primary baseline data that can be used as the first stage of data analysis in future studies. Please read these findings, keeping the following caveats in mind:

Because the study does not include baseline data on the health of the general dog or breed population, the rate of disease in guide dogs should not be interpreted as negative. In fact, guide dog schools have often been a model for evaluating health trends and reducing disease through appropriate breeding. Working guide dogs are a subset of the entire guide dog population, representing only 40 to 50 percent of all dogs bred to be guides. The survey should also not be considered representative of health issues in all dogs bred for potential guide dog use.

The survey indicates statistically significant differences, which simply means there is evidence of differences not caused by chance or coincidence. While these differences might allow guide dog schools to assess health and behavioral issues, many variables contribute to outcomes and no piece of information by itself should be over-interpreted. Variables that affect the outcome of a guide dog's life include experiences in the puppy raiser home, the school's methodology, the handler's lifestyle and experience, environmental exposures and injuries sustained on the job. Nevertheless, the responses provided by guide dog handlers provide useful information that pin-points top health issues for working guide dogs. It is Morris Animal Foundation's goal to continue to improve the lives of these wonderful animals. We hope this survey is but one step toward this goal.

Sincerely,

A handwritten signature in black ink that reads "Patricia N. Olson".

Patricia N. Olson, DVM, Ph.D.
President/CEO

Guide Dog Health Survey Morris Animal Foundation November 2008

Background: In 2008, Morris Animal Foundation (MAF) received a grant from the Laura J. Niles Foundation to address health and injury issues that lead to early retirement of a guide dog team or prevent the team from performing optimally. Although guide dog schools in the United States have considerable information on health issues that affect dogs under the age of 2, less information is available on those issues that affect working guide dogs later in life. To obtain information, MAF surveyed U.S. guide dog handlers (guide dog handler: an individual who is blind or visually impaired, partnered with a dog specially trained to safely guide), asking for information on diseases and injuries, reasons for retirement and issues that were of concern to them. Based on data received, the foundation will be developing a request for proposal (RFP) to address issues requiring additional research. In addition, some issues were identified that could have immediate intervention strategies.

MAF, established in 1948, has a 60-year history of addressing health issues that affect dogs, including guide dogs. MAF was initially called the Buddy Foundation, named for a guide dog owned by Morris Frank, who was the first guide dog user in the United States. Dr. Mark L. Morris Sr., a visionary veterinarian, researched and developed a nutritional diet to control the kidney disease that was affecting Buddy. Thus began a partnership between a veterinarian and a client that resulted in better health for a guide dog. Since our beginning, MAF has funded more than 1,600 research studies benefiting animals around the world.

Methodology: An online survey was created using Survey Monkey. The Internet surveying tool was first tested with visually impaired handlers to ensure accessibility and accuracy. U.S. Guide dog schools and advocacy groups were sent a letter or e-mail requesting their support to notify constituents, and a Web link to the survey was provided. The survey did not ask constituents to name the school that trained their dog, but it did ask for ZIP codes to assess whether any health issues were more prevalent in certain geographic locations.

Demographic information was obtained on handlers, including age, gender and number of years that a person had been a guide dog handler. Demographic information was also obtained on current and previous guide dogs, including breed, gender and age at retirement. Respondents were asked to rate their current and previous guide dogs for guide work, enthusiasm, personality, stress and behavior. They were also asked to provide health diagnoses for their current or previous guide dog, captured into the following categories: orthopedic, skin, ear, cancer/tumors, gastrointestinal, eye, endocrinologic, neurologic, kidney, heart, respiratory, blood/lymph and liver disorders. Information was also obtained on injuries the guide dog may have sustained. Overall, the survey consisted of 72 multiple-part questions. The survey was online from July 14, 2008, through August 14, 2008.

Results: More than 1,000 respondents answered the survey. The survey had a margin of error of ± 3 percent. Respondents were not required to answer every question, which resulted in lower sample size for some questions.

Demographics of respondents:

- Sixty-seven percent of the handlers answering the survey were women
- Fifty-two percent of all handlers answering the survey were over the age of 50
- Thirty percent of the handlers had been guide dog users for more than 20 years
- Forty-five percent of the handlers reported that they had had four or more guide dogs
- Most respondents indicated that they paid for their dog's veterinary care, 24 percent reported that veterinary care was supported by the both handler and the guide dog school and 5 percent indicated that the guide dog school provided all support for veterinary care
- Respondents represented more than 1,500 guide dogs

Demographics of guide dogs:

- The breed representing the highest percentage of both current and previous guide dogs was the Labrador retriever (59 percent for both categories)
- Although not statistically significant, German shepherd use among respondents tended to decrease slightly from the previous to current dog categories (17 percent to 12 percent), and the use of crossbreeds tended to increase (7 to 15 percent)
- Male and female dogs were nearly equal in distribution, and nearly all were neutered
- A majority of current guide dog users (89 percent) indicated that their dog slept in the handler's bedroom

Health issues reported by respondents:

- No difference in health issues was identified in the survey between male and female dogs
- Orthopedic problems were reported as the top issue affecting previous guide dogs (42 percent).
 - Arthritis was the most commonly reported orthopedic disorder (10 percent of current guide dogs and 36 percent of previous guide dogs)
 - Orthopedic diseases were higher in the South than in the West
- Skin problems occurred in 30 percent of current guide dogs and 40 percent of previous guide dogs
 - Golden retrievers were reported to have more skin conditions than Labrador retrievers
 - Overall, skin disease for current guide dogs was reported to be higher in the South than in other regions (95 percent confidence level)
 - Allergies for current guide dogs also tended to be higher in the South (90 percent confidence level)
- Ear-related health issues were reported in 21 percent of current guide dogs and 35 percent of previous guide dogs
- Cancer and/or tumors affected 28 percent of previous guide dogs
 - Lymphoma was the most common diagnosis; 6 percent of handlers named this cancer as a health issue for a previous guide dog

- Gastrointestinal disease was reported to have occurred in 14 percent of current guide dogs and 19 percent of previous guide dogs
 - Parasites were reported for 8 percent of current guide dogs and 7 percent of previous guide dogs
 - Inflammatory bowel disease was reported for 5 percent of current guide dogs and 8 percent of previous guide dogs
 - Bloat was experienced by 3 percent of previous guide dogs, whereas 5 percent of previous guide dogs had experienced colitis
- Cataracts were reported to have occurred in 15 percent of previous guide dogs
 - Eye diseases for current guide dogs were higher in the Northeast United States than in the West and Midwest (95 percent confidence level)
- Kidney disease for current guide dogs was higher for those living in the South than in the Midwest (95 percent confidence level)
- Guide dog handlers ranked cancer as their top health concern followed by arthritis

Guide work, enthusiasm, personality, stress and behavior reported by respondents:

- Current guide dogs received higher ratings compared with previous guide dogs for guide work, enthusiasm, personality and stress
 - Male guide dogs were rated highest in their enthusiasm and were also rated to be less stressed
 - Golden retrievers were rated highest for outgoing personality and were reported to be less stressed
- Twenty-nine percent of handlers gave their current guide dog a low rating for ability to deal with stress
- Nearly one-third of current guide dogs and slightly more than 20 percent of previous guide dogs were rated by handlers as being easily distracted
- Food scrounging was reported as an issue for 28 percent of current guide dogs and 24 percent of previous guide dogs
 - By breed, the lowest percentage of food scrounging behavior was reported for German shepherd dogs (8 percent) compared with Labrador retrievers (31 percent), golden retrievers (29 percent) and crossbreeds (29 percent)
- Thunderstorm phobia was reported in 21 percent of current and 16 percent of previous guide dogs
 - Handlers reported more thunderstorm and noise phobias for female guide dogs than for male guide dogs

Injuries reported by respondents:

- Eight percent of current and 12 percent of previous guide dogs had been attacked by another dog
- Three percent of previous guide dogs and 1 percent of current guide dogs had been hit by cars (some while working)

Age at retirement:

- The average age at time of retirement was highest for German shepherd dogs (n=115 dogs) at 96 months compared with 86 months for Labrador retrievers (n=313 dogs) and

88 months for golden retrievers (n=47 dogs) (99 percent confidence level for German shepherd dogs versus Labrador retrievers; 95 percent confidence level for German shepherd dogs versus golden retrievers)

Discussion: Guide dog wellness is the result of a complex interaction of genetics, environment, training, nutrition, care, socialization and exercise. Although the current survey was not intended to address risk factors for health, obtaining information from those constituents who live and work with guide dogs was deemed a critical step toward developing future research priorities. In some cases, immediate intervention strategies can be implemented whereby the guide dog team can have a longer and healthier life together.

For example, further control of intestinal parasites might reduce the incidence of dogs suffering from gastrointestinal disease and thereby enhance work. Similarly, schools and advocacy groups could use information about dog attacks to address the injuries associated with dog bites. The survey suggests that attacks of teams by off-leash or uncontrolled dogs are a serious issue. In addition to the immediate harm from an attack, the guide dog often becomes fearful and unable to perform its critical work.

One handler wrote, “[My dog] suffered mental trauma after being attacked three times.” Another respondent commented that the dog was retired (due to stress) after an unprovoked attack. And yet another person explained, “[It] happened within [the] first year of placement ... [my guide dog] was jumped by an off-leash golden retriever on our way to work one day. [He] was unable to defend himself. A construction worker was nearby and was able to pull the other dog off my guide. [He] had no physical injury from this attack, but he did become fearful of going past that house. We had to change our route to work”

The information presented in this report is MAF’s first attempt to collect information on the overall population of working guides, age 2 years and older. The U.S. population of guide dog handlers has been estimated at 10,000 to 12,000. If this estimate is accurate, then approximately 8 to 10 percent of the entire U.S. guide dog handler population was included in the survey.

The respondents (n=1,003) represented more than 1,500 guide dogs working between 1985 and 2008. In addition to the three traditional breeds (Labrador retrievers, golden retrievers, and German shepherd dogs), respondents also reported that other purebreds were used as guides: Akita, smooth coated collie, Australian shepherd, boxer, vizsla, Airedale terrier, Belgian sheepdog, collie, Weimaraner, Doberman pinscher, border collie, Bouvier, Newfoundland dog and poodle. In addition to purebred dogs, several dogs were listed as crossbreeds (n=185 crossbreeds).

Based on 612 responses, the average age of death for a guide dog in the survey was 10 years 7 months. A few dogs lived to be as old as 16 years. For dogs dying under the age of 9, three-fourths died from cancer. This could be the reason most guide dog handlers listed cancer as their top health concern, rather than skin disease, arthritis or ear-related issues, which may be debilitating but are generally not fatal. Respondents’ comments suggest that it is particularly devastating when a dog retires prematurely due to a fatal disease.

One handler wrote, “He developed a brain tumor. He was confused and [after] collapsing for five days, I [had him] euthanized. It was 11 years ago and I’m still distressed about it.” Another respondent wrote, “Cancer [was] first diagnosed when he was 4. [He was] treated, recovered and worked another few years. The original kind of cancer and another came back very aggressively. [I] put him to sleep and still cry about it.”

Management decisions at any guide dog school should be made on the overall assessment of multiple factors and variables for teams, not solely on information from this or any other survey. Nevertheless, the survey does suggest the need to obtain complete metrics on a guide dog—from birth to death. Obtaining information on the health and training success during the first two years is not a complete picture of team health and longevity. For example, the working life of a German shepherd was longer in our survey than for Labrador retrievers or golden retrievers. However, this information must be considered along with many other factors, such as trainability.

In addition to specific information, respondents gave more than 11,500 open-ended comments. No attempt was made to analyze these comments, but unedited remarks might be of interest to the professional training staff at U.S. guide dog schools.

Guide dog teams have been referred to as the gold standard for a bond between a person and his or her dog. Handlers provide love and care to their dogs; the dogs provide independence and loyalty to their handler. The overwhelming response to the survey made it abundantly clear just how much guide dog handlers appreciate and love their dogs.

Any work that allows these wonderful teams to enjoy even better health and wellness is very important to MAF. After all, it was important in our past to help Buddy and remains important in our future to give all guide dogs better health.

Acknowledgments

MAF would like to sincerely thank the Laura J. Niles Foundation for funding this survey and subsequent research that will address issues of high significance. We would also like to thank the incredible work of volunteers who helped make this survey possible: Jane Brackman, Ph.D.; Sharon Brandt; Jim Kutsch, Ph.D.; Elizabeth Lund, DVM, Ph.D.; and Sheila Styron.

MAF is extremely grateful to all guide dog handlers who shared their personal perspectives and experiences.

Patricia Olson, DVM, Ph.D.
President/CEO

To order a Power Point presentation with details of the survey, e-mail mailbox@MorrisAnimalFoundation.org or call 800.243.2345.