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GOLDEN HEROES

Why are so many Golden Retrievers dying of cancer?

The Morris Animal Foundation is studying
3,000-plus "heroes" to find out.

The incidence of cancer in Golden
Retrievers is high—about 60% will be diagnosed with cancer in their lifetimes.

By Margaret Littman

When Valerie Robson first heard about the Morris Animal Foundation Golden Retriever Lifetime Study, she knew she had to get her then-puppy enrolled. Astro was the sixth Golden that Robson and her husband had owned. Three of them had passed away due to cancer. "When we heard they were looking at the four most deadly canine cancers (lymphoma, hemangiosarcoma, osteosarcoma and mast cell tumors), we knew we had to be part of it," says Robson. "This is a way to give back to breed we absolutely love."



Astro is Hero #11, meaning he was the eleventh dog admitted to the group of 3,044 pure-bred Golden Retrievers enrolled in the study, conducted by the Denver-based Morris Animal Foundation. Designed to be the largest, most comprehensive canine health study in the United States, the Golden study is collecting health, environmental and behavioral information on the popular breed with the hope of improving health for Goldens, other animals and even humans.

An estimated 6 million dogs and 6 million cats are diagnosed with cancer each year in the United States. The incidence of cancer in Golden Retrievers is high. Based on a previous questionnaire completed by Golden Retriever owners in the 1990s, it's estimated that about 60% of Golden Retrievers will be diagnosed with cancer in their

lifetimes, explains Kelly Diehl, DVM, Senior Scientific Programs and Communications Adviser at Morris Animal Foundation. One of the outcomes of the study will be a better understanding of the incidence of cancer in this breed.

The Process

The study is in its sixth year; the first three years were spent recruiting owners and veterinarians (2,679 total) to participate. Veterinarians of enrolled dogs conduct extensive subsidized annual physical exams. They take blood, hair, urine and fecal samples for immediate analysis and bank additional samples for future research. (Owners get some test results right away, separate from the study samples.)

Owners complete a 60-page online questionnaire about activity levels, where dogs sleep, what they eat, what kind of water they drink and even what kind of heat source is used in their





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home. Participants are asked to report data and not interpret the questions as suggestions to improve their dog's health. Robson says that's easy to do, but using the Whistle activity tracker (similar to a Fitbit for dogs) does encourage her to take Astro outside for another game of fetch if he hasn't had enough exercise.

The Hope

It isn't just the dogs who benefit—a Facebook group of 3,400 members has helped owners and their supporters develop a bond, too. "They have become like extended family to us," Robson says. "When we travel out of town, we visit other heroes. And our favorite pet-sitter has two heroes in the study." The group helps retention in the study stay high (about 85%, which is unheard of in comparable human studies) and provides comfort when dogs are sick or pass away. To date, 89 "heroes" have died. When dogs eventually pass away, additional tissue samples are banked for research.

But these dogs are young now—the oldest is seven and the youngest is three—so the study is in the data collection phase, compiling information ranging from spay and neuter status to ear-infection rates (the most frequent ailment of participating dogs thus far). Environmental data will allow researchers to study things that have been hard to analyze in the past. For example, over time researchers

may be able to look at a connection between incidence of disease among dogs who were living in areas where fire retardants were used during the California wildfires last year, Diehl says. The data may be used to look at other diseases as well, including skin conditions and joint disease.

"We want researchers to come use our samples-3,000 is not a trivial number for a veterinary study," Diehl adds. She's looking forward to studies that will be useful for other breeds and animals in addition to Goldens, as well as for humans. "Dogs live with us and are exposed to the same things as we are, so they can be models for human disease," she says.

Diehl also expects to see other findings emerge. For example, today general veterinary recommendations are to spay or neuter dogs at the same age, regardless of breed. There might be an optimal time to neuter dogs based on their breed or size, says Diehl. "Large breed dogs take longer to mature," she says. "A Great Dane might be two years old before it is mature, so it may need to wait longer to be spayed than a Yorkie."

Robson knows that Astro's participation in the study won't affect his health, but she takes the long view. "It won't be in these dogs' lifetimes," she says, "but it will help dogs down the road."

10 Warning Signs of Cancer in **Dogs and Cats**

consult your veterinarian:

- 2. Sores or wounds that do not heal
- 3. Weight loss
- 4. Change in appetite or water
- **5.** Bleeding or discharge from any body opening
- **6.** Offensive odors
- 7. Difficulty eating, chewing,
- 8. Reluctance to exercise or loss of stamina in dogs and
- 10. Difficulty breathing, urinating or defecating

Cancer Center at Colorado State University



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