

What makes large dog breeds more susceptible to cancer?

Although age, gender, diet, and environment all impact a dog's likelihood to develop cancer, large, athletic dogs are more likely to develop cancer than smaller breeds, but why?

The answer to this question isn't 100% clear, but it is believed that large dog breeds have a gene that was present when the breed started that can increase their risk of getting cancer.



Sources

Gp.admin. "Golden Retriever." The Drake Center For Veterinary Care

Pack, Tina. "Why Are Golden Retrievers so Cancer Prone?" Holiday Barn Pet Resorts

Understanding Cancer in Golden Retrievers, grca.org

Hovan R. Perspectives: Understanding Cancer in Golden Retrievers. GRNews, November-December 2006.0

Why Do Golden Retrievers Get Cancer and What Can You Do?

<https://www.totallygoldens.com/why-do-golden-retrievers-get-cancer>.

CANCER IN LARGE DOG BREEDS

- Basic information
- Types of cancer
- Warning signs
- Treatment options
- Susceptibility



By: Katie Berry
Girl Scout Troop 41706



Basic Information

- Six million dogs are diagnosed with cancer each year. About 60% of all Golden Retrievers die of cancer, twice the rate of other dog breeds.
- The most common types of cancer in Goldens are lymphoma and Hemangiosarcoma, followed by mast cell tumors, and osteosarcoma.
- Cancer is so prevalent in Golden Retrievers because of the “founders effect” in purebred dogs where the gene for cancer existed in the dogs originally used to create the breed. Now all Goldens are descended from that small original group.



Types of Cancer

The two most common cancer diagnoses for large dog breeds are Hemangiosarcoma and Lymphoma. Hemangiosarcoma is a cancer of the vascular endothelium (blood vessel walls) affecting the heart and spleen of a dog. This may cause an enlarged spleen, anemia, and masses in the heart or abdominal organs. Symptoms include lethargy and appetite loss. One in five Goldens are affected by Hemangiosarcoma and the average age for diagnosis is between 9 and 12 years old.

Lymphoma is a systemic cancer that affects cells in the immune system. There are multiple different ways that lymphoma can develop in a dog's body. Although there are over 30 types of canine lymphoma, the most common types are multicentric lymphoma (affecting the whole body), alimentary lymphoma (affecting the gastrointestinal tract), mediastinal lymphoma (affecting the lungs and chest cavities), and extranodal lymphoma (affecting the skin).

Warning Signs and Treatment Options

Warning signs of Hemangiosarcoma include weakness, lethargy, decreased appetite, and painful abdomen. If treated early, a dog's life expectancy is 6-10 months. Without treatment life expectancy drops to 4-16 days. Treatment options are surgical removal, followed by chemotherapy.

Warning signs of lymphoma are loss of appetite, lethargy, weight loss, fevers, and difficulty breathing. Although lymphoma is not curable in canines, if it is identified and treated early, a dog can live between 6-12 months. Without treatment, the life expectancy drops to 4-6 weeks. Treatment options include chemotherapy, surgery, or radiation.

