

CANCER

When it comes to cancer in dogs, a diagnosis these days isn't as bleak as it used to be. Indeed, 50% of all canine cancers are curable, if caught early enough. The disease is mostly an affliction of old age (though, sadly, some cancers strike dogs as young as two).

It may seem like more dogs get cancer than ever before, but it's likely because they enjoy a longer life span, thanks to vaccinations against infectious diseases like parvovirus and distemper, and new treatments for congenital, degenerative and metabolic disorders.

What Is Canine Cancer?

“Cancer” is the broad term for a complex cluster of more than a hundred diseases. Although there are many causes, each type of cancer starts with alterations in genes that tell cells how to function, which triggers accelerated and uncontrolled cell growth. The defective signal may hide in abnormal genes inherited from parents or germinate when normal genes are exposed to harmful environmental influences.



Some breeds are predisposed to certain types of cancer, and in those cases, a strong inherited genetic component is suspected. It is thought that a small number of genes account for cancer risk — but rarely is a single gene the sole cause.

How Common Is Canine Cancer?

By the time people and dogs pass 70 and 10 years of age, respectively, about 50 percent will have been diagnosed with some type of cancer. The malady accounts for approximately 23 percent of all deaths in people. In dogs, cancer mortality varies across breeds, from under 10 percent to higher than 60 percent.

Recently studies have suggested a link to the risk of certain cancers with early neutering and spaying in the golden retriever. The cancer mortality in Australian/European-bred Goldens is about 38 percent. Interestingly, this appears to be significantly lower than the 61 percent cancer mortality found in North American Goldens. The high incidence of cancer in Northern American Golden Retrievers appears to be a relatively recent phenomenon. Studies suggest that risk for some types of cancer is related to recent genetic mutations in North American Golden Retrievers. The genetic differences seen between European and North American Golden Retrievers may be key to understanding the etiology of canine cancer. The Golden Retriever Lifetime Study is ongoing to identify possible nutritional, environmental, lifestyle and genetic factors that may be involved.

The following are four of the most common malignant cancers in golden retrievers:

1. Lymphoma
 - > Most common type of blood-cell tumour
 - > Similarities to non-Hodgkin's lymphoma in people

- > Several breeds pre-disposed to lymphoma: bulldogs boxers and bullmastiffs
- > Classified into 2 types: B-cell and T-cell

2. Hemangiosarcoma

- > One of the most aggressive tumours of dogs
- > Three common sites: spleen, right atrium of the heart and skin
- > Strong breed association with German shepherds and golden retrievers
- > Affects older dogs (average age 10 years)

3. Osteosarcoma

- > Most common primary bone tumour of dogs
- > Affects primarily large and giant-breed dogs
- > Height is more important risk factor than breed
- > Occurs most commonly in dogs 7-9 years of age, and 1-2 years of age

4. Mast Cell Tumour

- > Most common skin tumour of dogs
- > Many breeds at risk; highest incidence in brachycephalic breeds
- > One of the most cured cancers in dogs
- > Surgery is first and best treatment choice

Please refer to our other Factsheets for more information on these individual cancers.

Luckily, advances in cancer treatment for dogs have extended the quality of life of pets with cancer by months, sometimes even years if the cancer is caught early and the dog does not have any other comorbidities. Some cancers, such as mast cell tumours, can be cured if the tumour is low-grade and clean margins are achieved with surgery. Other cancers, such as lymphoma, require chemotherapy.

Since the chemotherapy doses are much lower for dogs than people, the side effects are usually less than that seen in humans meaning dogs can go on to live longer, healthier lives post diagnosis.

Fifty percent of cancers are curable if caught early enough. If you notice any changes in your dog: gait, eating and drinking, activity level, lumps or bumps, unusual smells, anything out of the ordinary, see your veterinarian immediately. Early diagnosis is key to a positive outcome. Sometimes it starts with a misstep or subtle lameness. Or a small lump on the leg that becomes tender to the touch. Or a dramatic, sudden fracture.

Warning Signs of Cancer



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