

# CAUSE OF DEATH IN THE GOLDEN RETRIEVER SURVEY RESULTS 2016

This health survey was designed to tell us the frequency of various diseases in our breed, help us learn the life span of Golden Retrievers, and serve as a record of the state of the breed's health since 2002.

### Introduction

In 2009 the National Golden Retriever Council (NGRC) posted a Cause of Death Survey in the Golden Retriever to the NGRC's web site and golden retriever owners were invited to respond to the questionnaire, the survey was updated in 2011 and now in 2016 to gain a better understanding of the causes of death in golden retrievers and provide insights on how physical traits, diet, and environment effect certain diseases and longevity.

This summary is prepared by the NGRC and represents its interpretation of the data collected from 2009 to 2016. Responses were collected primarily from an internet survey. Medians were calculated for data that consisted of continuous data and proportions for responses that consisted of categorical data. The denominator for each categorical response was determined based on the number of respondents answering the particular question (i.e. not every respondent answered every question).

### **Results**

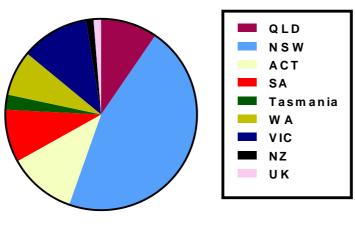
### Survey Respondents

From 2009 to 2016, 216 surveys have been submitted via the NGRC website of these 30 (14%) were duplications and 20 (9%) were missing required information leaving 171 (79%) surveys that have complete information and these 171 surveys are included in this summary.

In the study 89 (52%) of the golden retrievers were female and 82 (48%) were male. Of the 171 surveys, 157 of them stated their location of these 72 (46%) were from NSW, 18 (11%) from ACT, 18 (11%) from Victoria, 15 (10%) from Qld, 14 (9%) from SA, 12 (8%) from WA, 4 (3%) from

Tasmania, 2 (1%) from NZ, 2 (1%) from UK and 14 (8%) unknown, Figure 1 provides a summary of response by region.

# Demographics of Respondees



Total=157

Figure 1: Location of survey responders.

# Age of Death

Eight (3 females & 5 males) of the dogs were over the age of 15 at time of death, 64 (32 females and 32 males) were aged between 12 and 15 years, 62 (33 females & 29 males) were between 8 and 12 years, 15 (7 females & 8 males) were between 3 and 8 years and 22 (14 females & 8 males) were between 0 and 3 years (Fig. 2). The median age group of death was 8-12 years and this was also the case for both male and females.

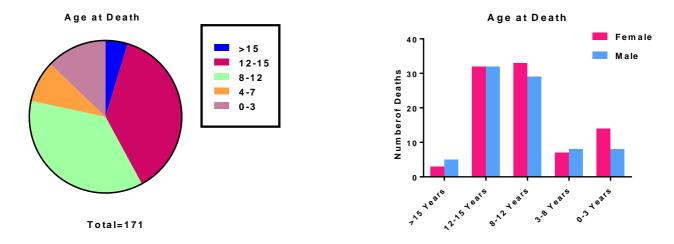


Figure 2: Age range of death reported in golden retrievers.

## Cause of Death

For the 171 deaths the most prevalent cause of death was cancer 72 (42%) dogs (29 males and 43 females,) followed by other cause which was 68 (40%) dogs (34 males and 34 females), Neurological 13 (8%) dogs (8 males and 5 females), Musculoskeletal 10 (6%) dogs (6 males and 4 females) and Cardiovascular 8 (5%) dogs (3 males and 5 females) (Fig 3).

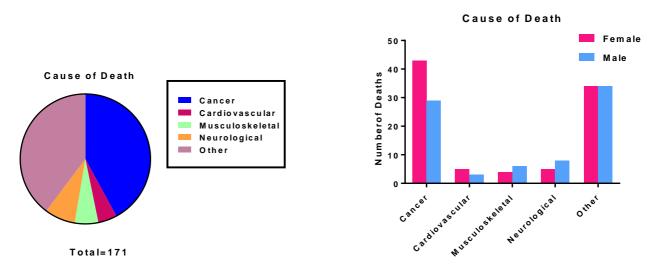


Figure 3: Cause of death reported in golden retrievers.

#### Cancer

Of the 72 deaths from cancer, the form of cancer is not stated in 40% of the responses (the survey was updated in 2011 to collect what type of cancer caused death). Where the form of cancer was reported, lymphoma or lymphosarcoma was the most prevalent form of cancer with a prevalence of 24%, followed by melanoma and hemangiosarcoma both at 8%. Other forms reported had a prevalence of 1% (Fig. 4)

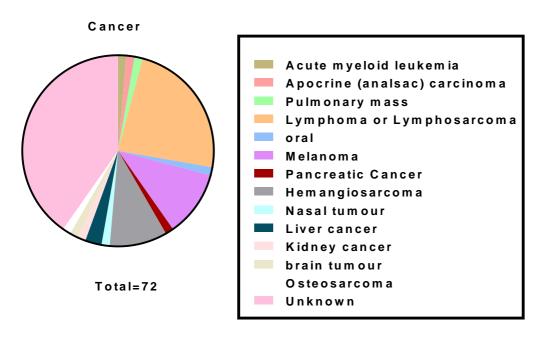


Figure 4: Types of cancer reported as the cause of death in golden retrievers.

# Other

Of the 68 deaths reported as other, 38 were from unknown cause, 23 from old age, 4 from trauma or accident and 1death recorded for the following laryngeal Paralysis, poison, snake bite and Peritonitis & Septicaemia Fig 5.

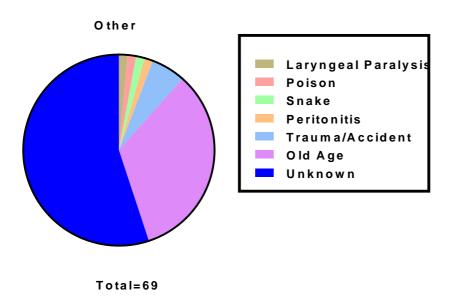


Figure 5: Other causes of death reported in the golden retriever,

Cardiovascular, Musculoskeletal and Neurological

For cardiovascular disease 7 were of unknown disease and 1 was from Aortic or Sub aortic Stenosis, for musculoskeletal disease 8 were of unknown type, 1 from osteomyelitis and 1 from degenerative

joint disease and the 13 reported deaths from neurological disease were of unknown type.

**Summary** 

The present survey was designed to obtain information about the cause of death in golden retrievers

and the results can be used by researchers to investigate the most common diseases reported for this

population and educate veterinarians and owners about the most prevalent disease in the breed. The

most common cause of death was neoplasia which has been reported as the most common cause of

death for many different breeds.

Some of the limitations of this study include; the number of survey responses included in the data

analysis especially in some states, hopefully this can be improved over the next few years by better

promotion of the survey. The responders to survey may not be representative of the entire golden

retriever population in Australia and the information gathered so far is probably biased towards

breeders, the survey has been updated in 2016 to determine this. The results are based on the owner's

responses and not the medical records of the dogs and some misinterpretation and incorrect reporting

of the original diagnosis may have occurred. In the initial survey only the cause of death was recorded

i.e. cancer, trauma etc.., not the type of cancer this was updated in 2011 and has since been updated

in 2016.

Despite the limitations discussed above the current study has generated a list of common diseases and

causes of death in golden retrievers. This will hopefully help veterinarians and breeders become

familiar with these diseases and anticipate future problems for golden retrievers.

I believe this project is worthwhile and have updated the current questionnaire to hopefully address

some of the limitations highlighted so far. The current survey can be found at the following link:

https://form.jotform.co/63480623633859

Carla O'Donnell

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