

# The Otterhound Club of America – Health Survey

**FINAL VERSION**

Summer 2024

KAIROS

# The Health Survey Context

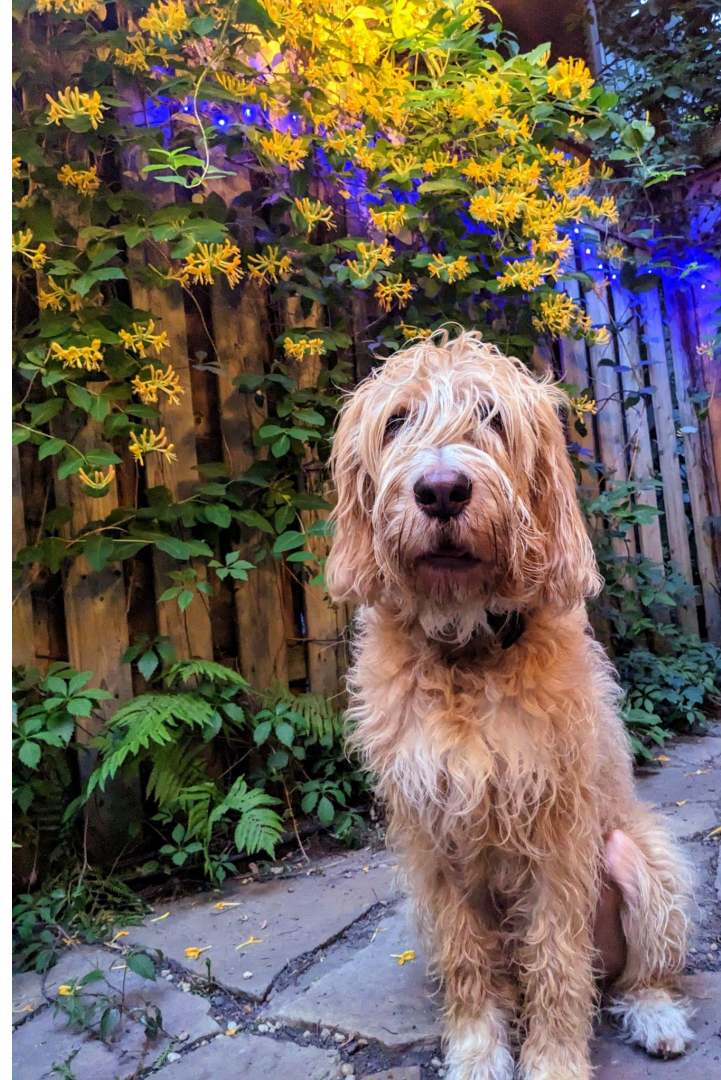


# INTRODUCTION

We are delighted to present the results of the health survey conducted for the Otterhound Club of America. From our first encounter with the Otterhound breed, we were captivated by their charm and the joy they bring, and we felt immediately welcomed by the warm community.

Our pro bono involvement in this project is a small token of our gratitude. We hope our contribution aids in the preservation of this beautiful, endangered breed, allowing them to continue enriching human lives for years to come.

Marie-Pierre and Stéphane, proud owners of Stella, and the Kairos team members



# OBJECTIVES

This initiative was lead by the Health Committee of the Otterhound Club of America.

The Club has the mission to promote. protect and preserve one of the most endangered breeds in the world - the Otterhound.



## 1. Assess Breed Health

Conduct a comprehensive survey to understand the overall health status of Otterhounds

## 2. Identify Key Health Challenges

Identify primary and prevalent health issues and areas needing attention.

## 3. Support Preservation Efforts

Equip the Otterhound Club of America with critical health information to aid in their mission

# METHODOLOGY

- 1 online survey
- North America and Europe
- 129 respondents
- 275 dogs

The survey was made accessible to the in December 2023 until January 15 2024.

The sample size is large and representative of the total Otterhound population, allowing us to confidently infer the results to the entire breed.

Many respondents agreed to share their data within the Otterhound database that was recently updated.

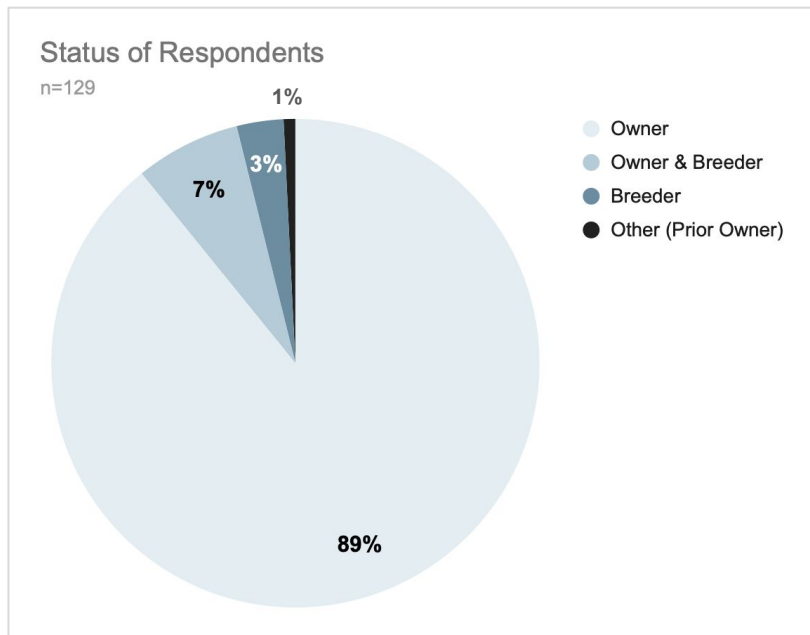
**This report is a preliminary version and does not yet include the executive findings.**

# Profile



# OUR PANEL

**129** RESPONDENTS



**275** OTTERHOUNDS

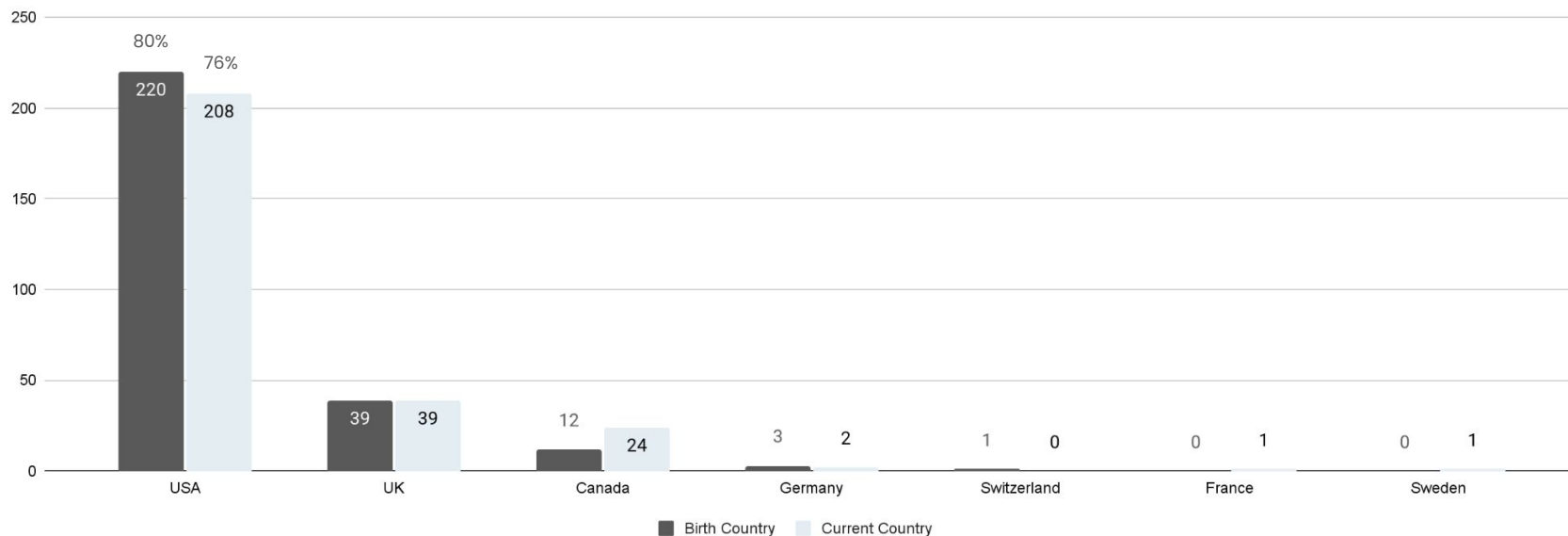


**2.1** OTTERHOUNDS  
PER RESPONDENT

# MOST OTTERHOUNDS FROM THE STUDY WERE BORN IN THE USA AND LIVE THERE TOO

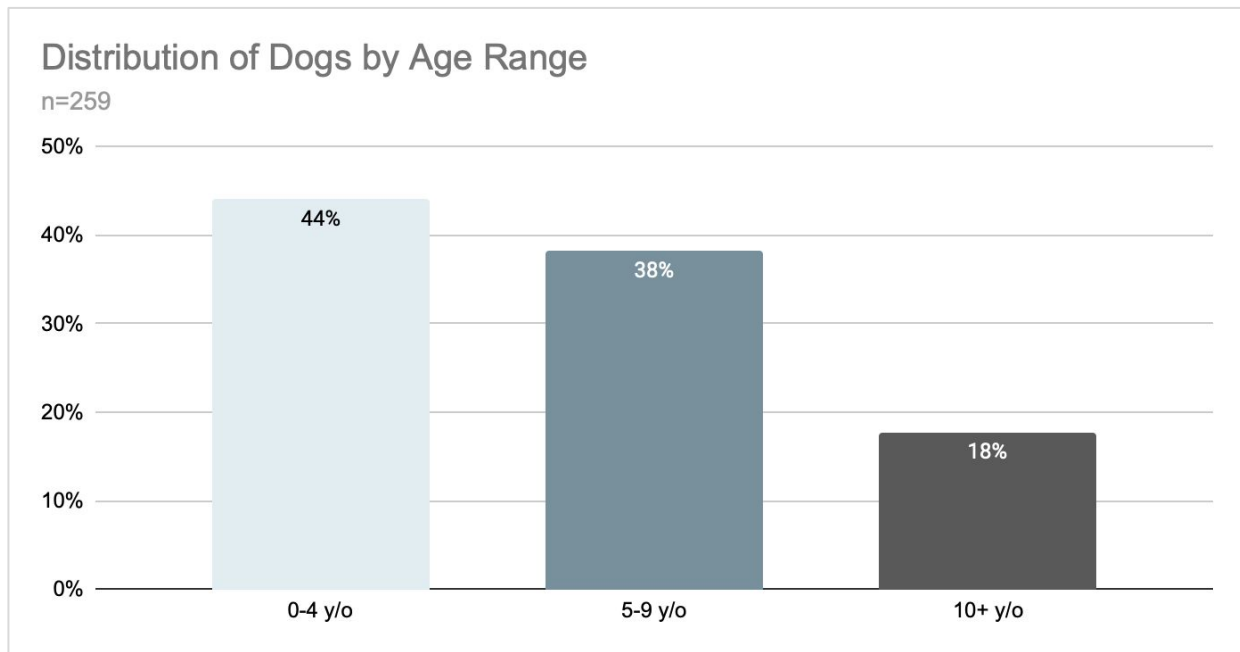
Dogs' Country of Birth and Current Country

n=275





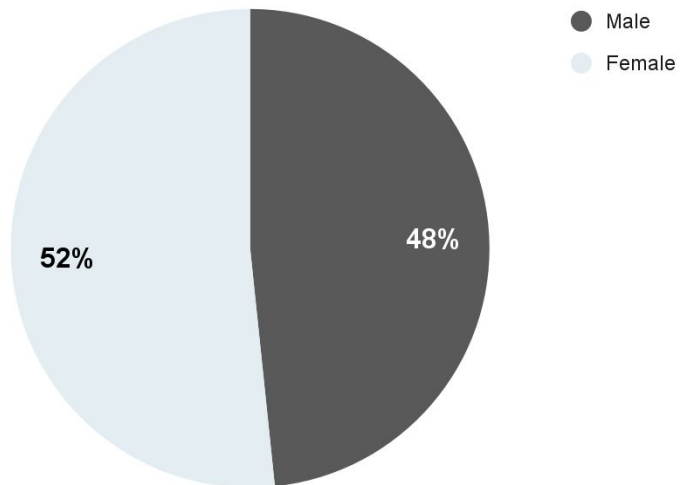
# OTTERHOUNDS AGED 0 TO 4 REPRESENT THE LARGEST AGE GROUP, FOLLOWED BY THE 5-9 GROUP



# ABOUT HALF-AND-HALF SEX REPRESENTATION

Sex of Dogs - Total

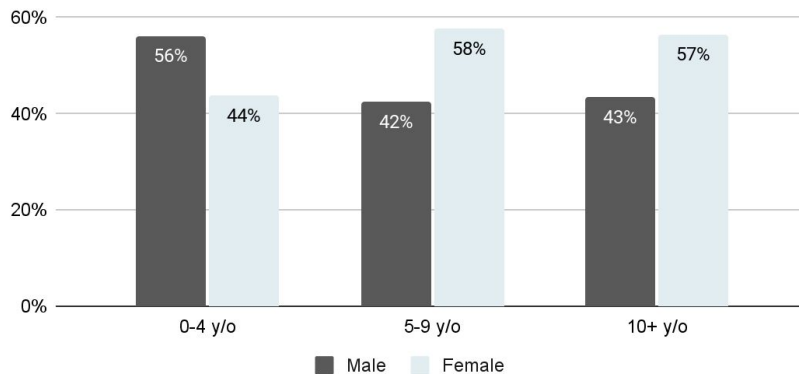
n=273



There are more males in the youngest age group and more females in the oldest ones.

Sex by Age Range

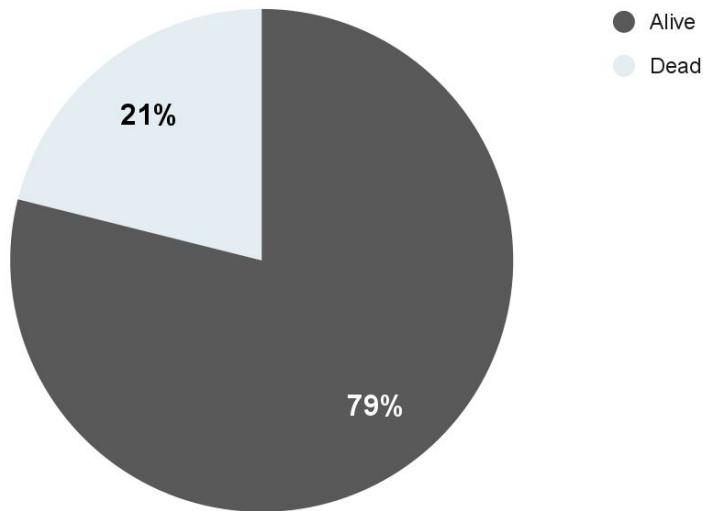
n=257



# MOST OTTERHOUNDS SURVEYED ARE STILL ALIVE

Dogs Still Alive - Total

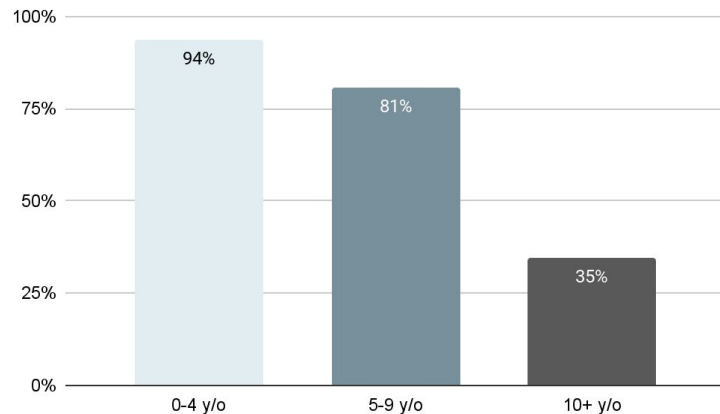
n=275



Most dogs aged 0 to 9 are still alive while the majority of dogs aged 10 and over aren't.

Dogs Still Alive by Age Range

n=259

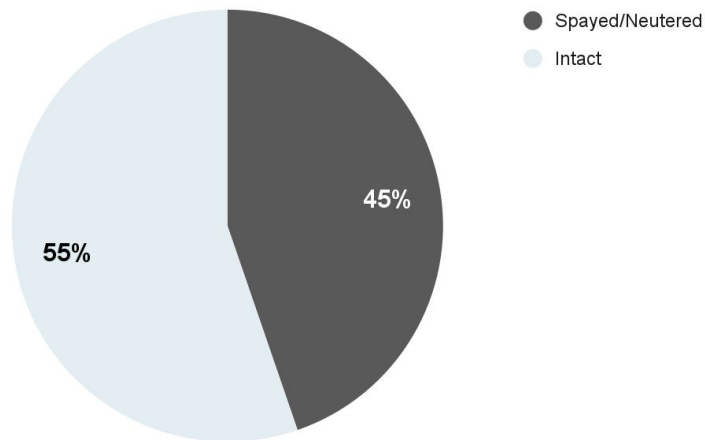


# Spaying/ Neutering

# OVERALL, A LITTLE LESS THAN HALF OF DOGS WERE SPAYED OR NEUTERED

Dogs Spayed / Neutered - Total

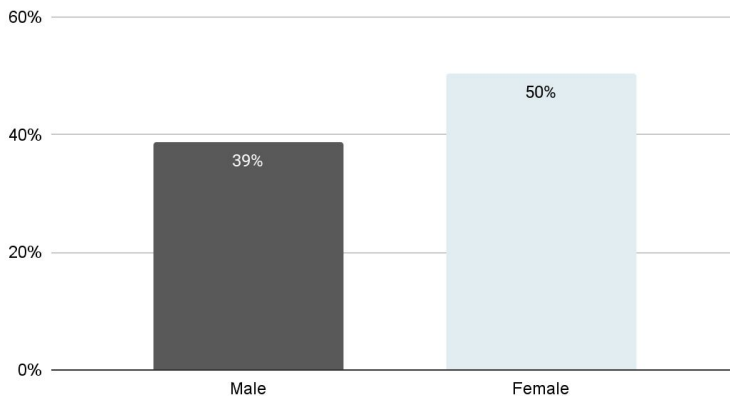
n=275



Half of female dogs are spayed : a larger proportion than that of male neutered.

Dogs Spayed / Neutered by Sex

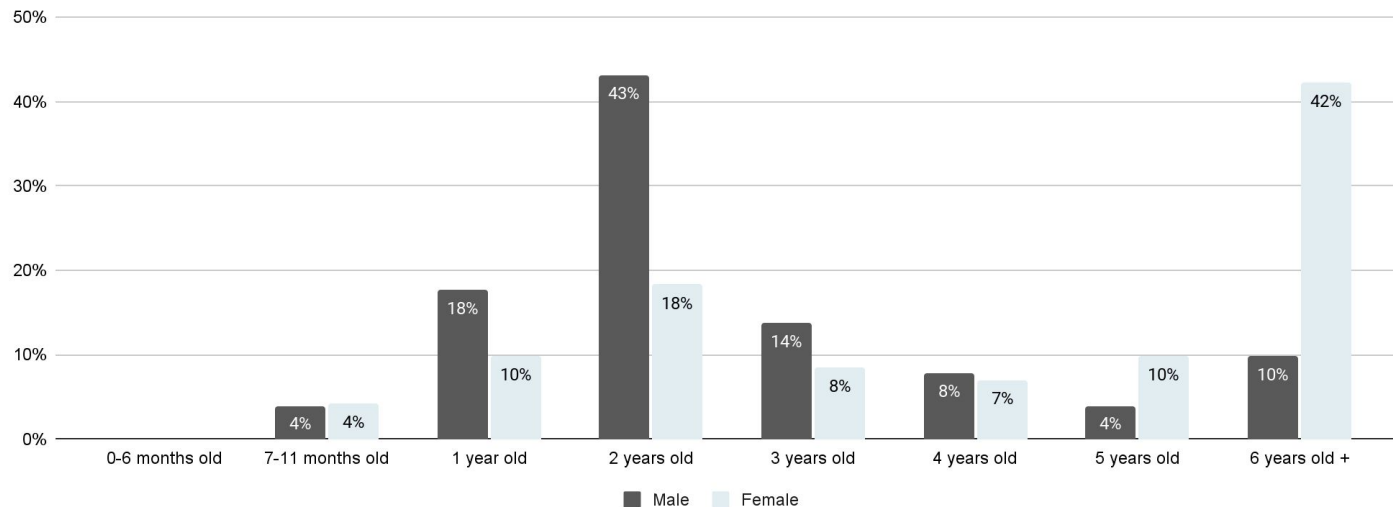
n=273



# NEUTERS AMONG MALES NORMALLY OCCUR EARLIER THAN SPAYS AMONG FEMALES

Age at Which Dogs Were Spayed / Neutered by Sex

n=122



**MALES :** 65 %  
neutered at 2 years  
old and under.

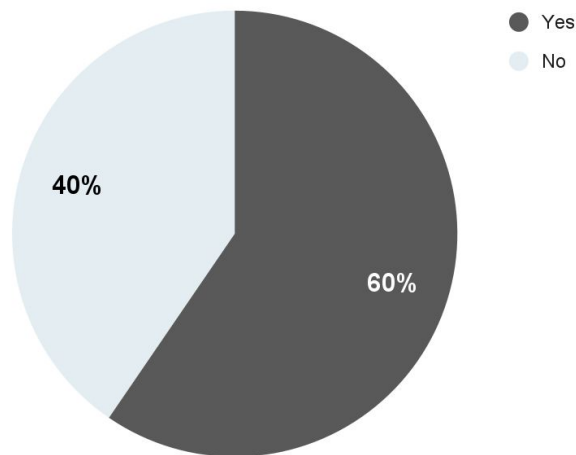
**FEMALES :** 52 %  
spayed at 5 years  
old and over.

# Health Clearances

# 60% OF DOGS HAD HEALTH CLEARANCES, THE MOST COMMON ONE BEING HIP X-RAYS

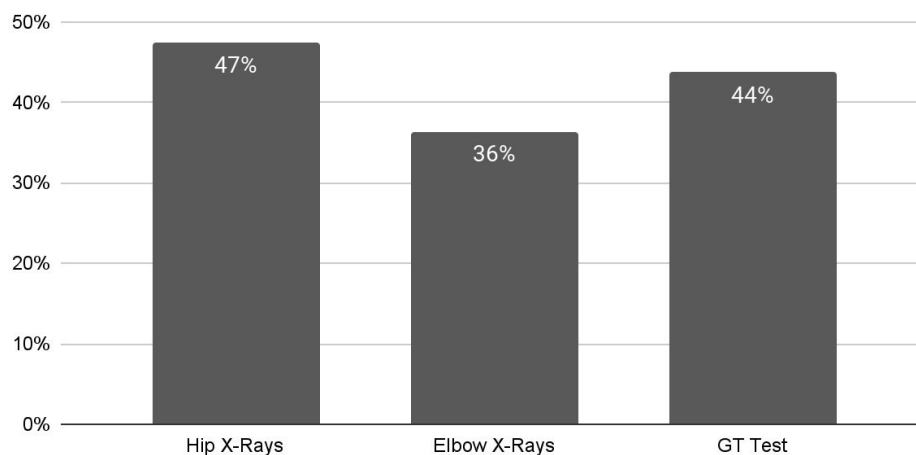
Health Clearances - Total

n=272



Type of Health Clearances - Total

n=272



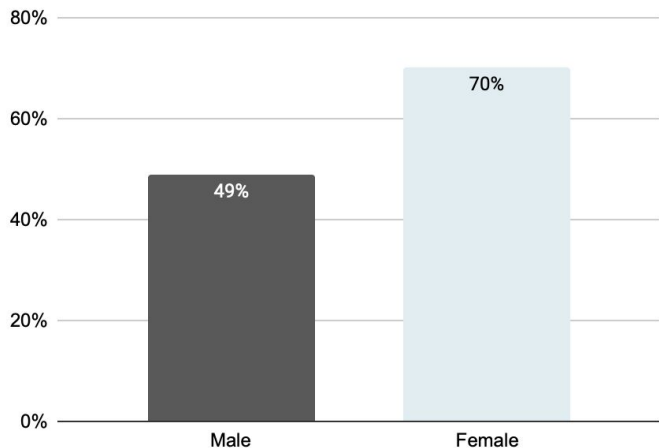


# THE MAJORITY OF FEMALE DOGS GOT HEALTH CLEARANCES VS. HALF OF MALE DOGS

All types of health clearances were performed on more females than males.

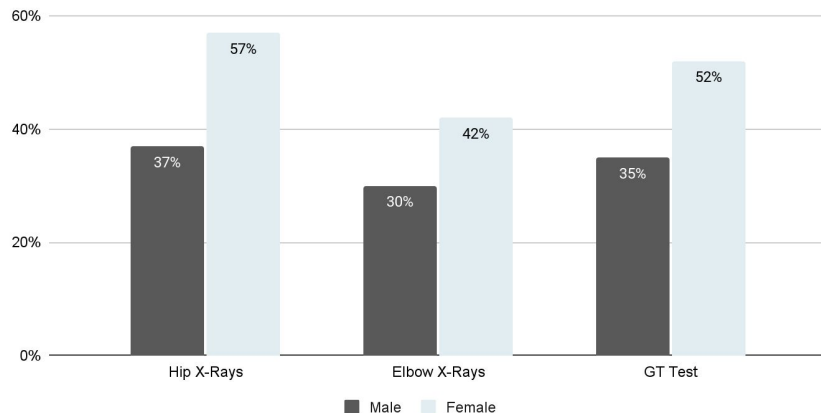
Health Clearances by Sex

n=270



Type of Health Clearances by Sex

n=273



# Health Survey

## The Results

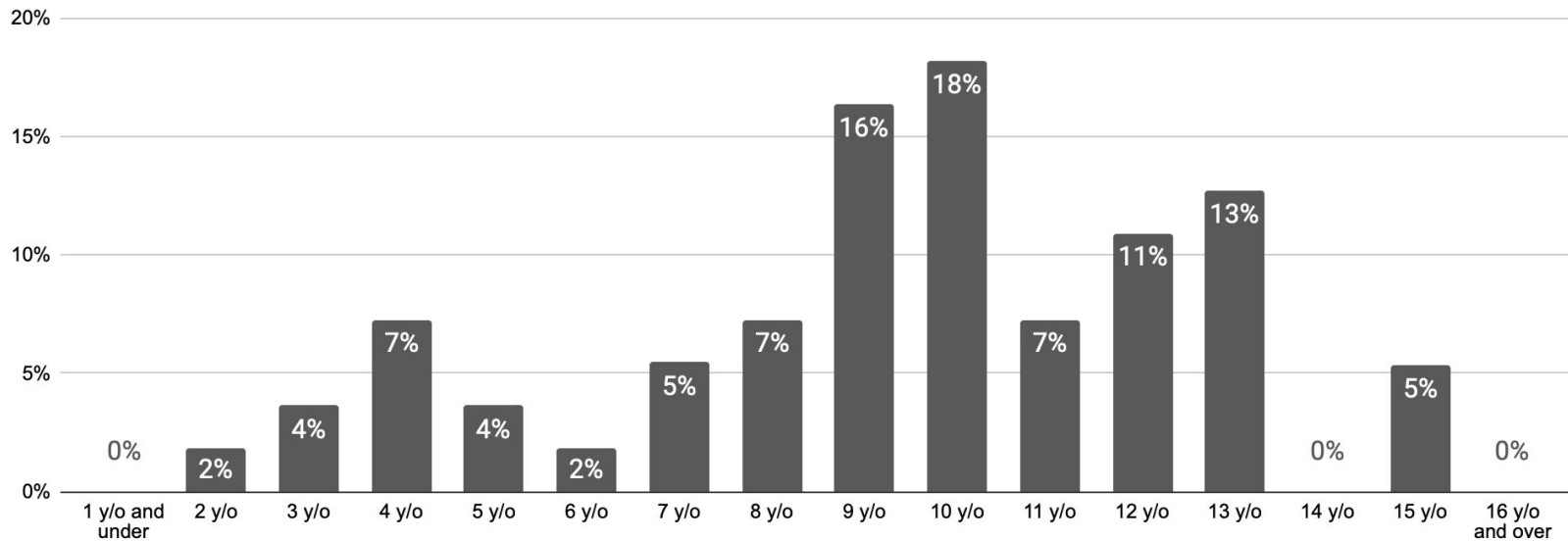


# Deaths & Causes

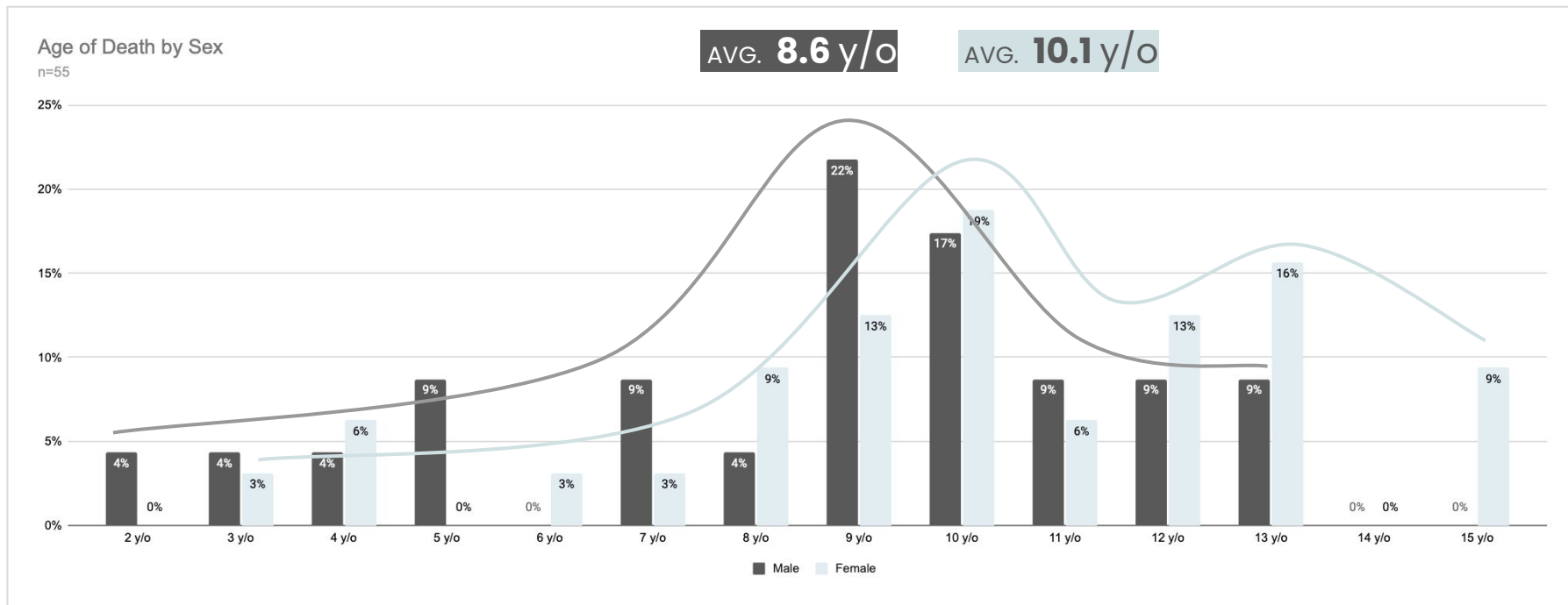
# AVERAGE AGE OF DEATH IS 9.39 – WITH PEAKS AT 9-10 YEARS OLD

## Age of Death

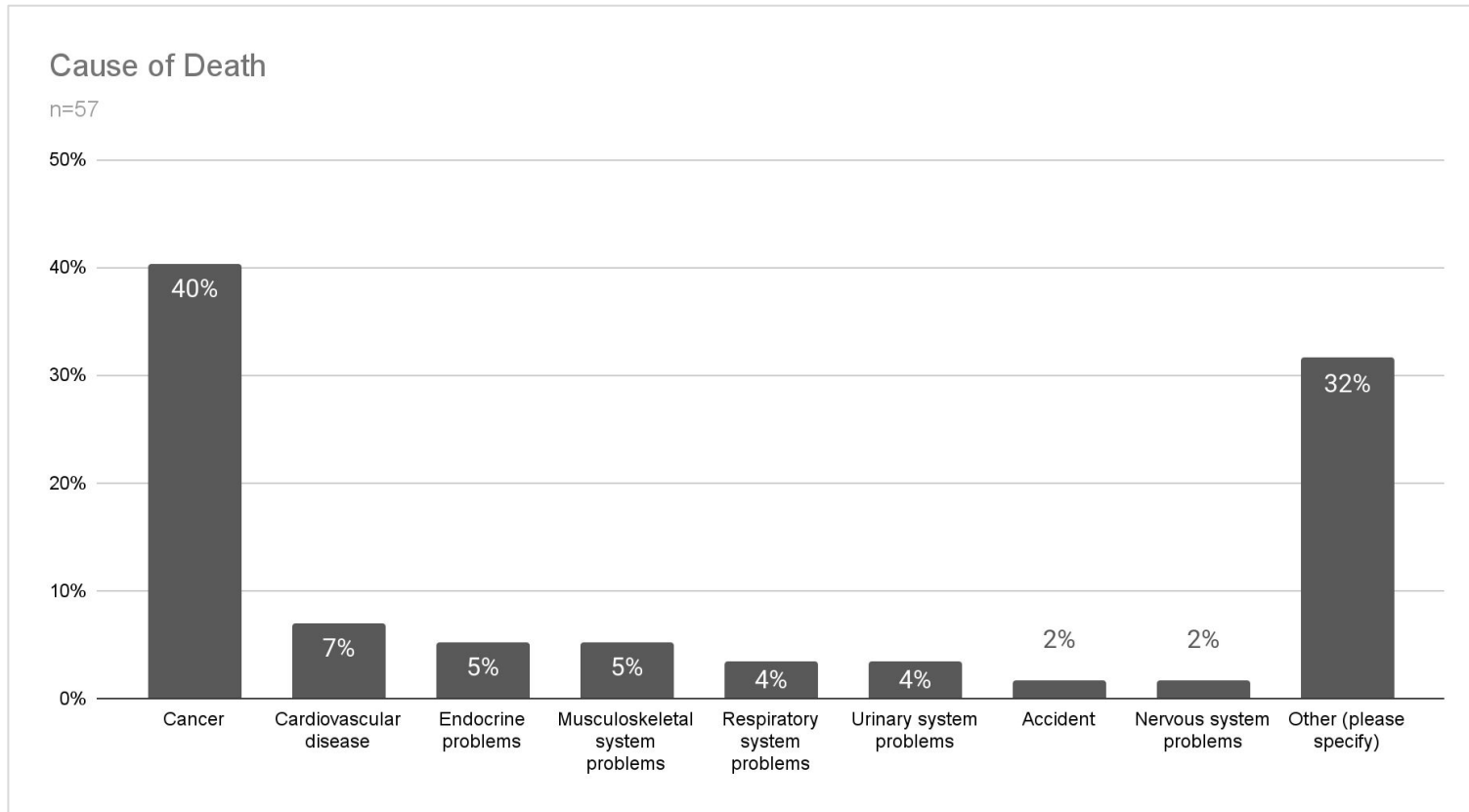
n=56



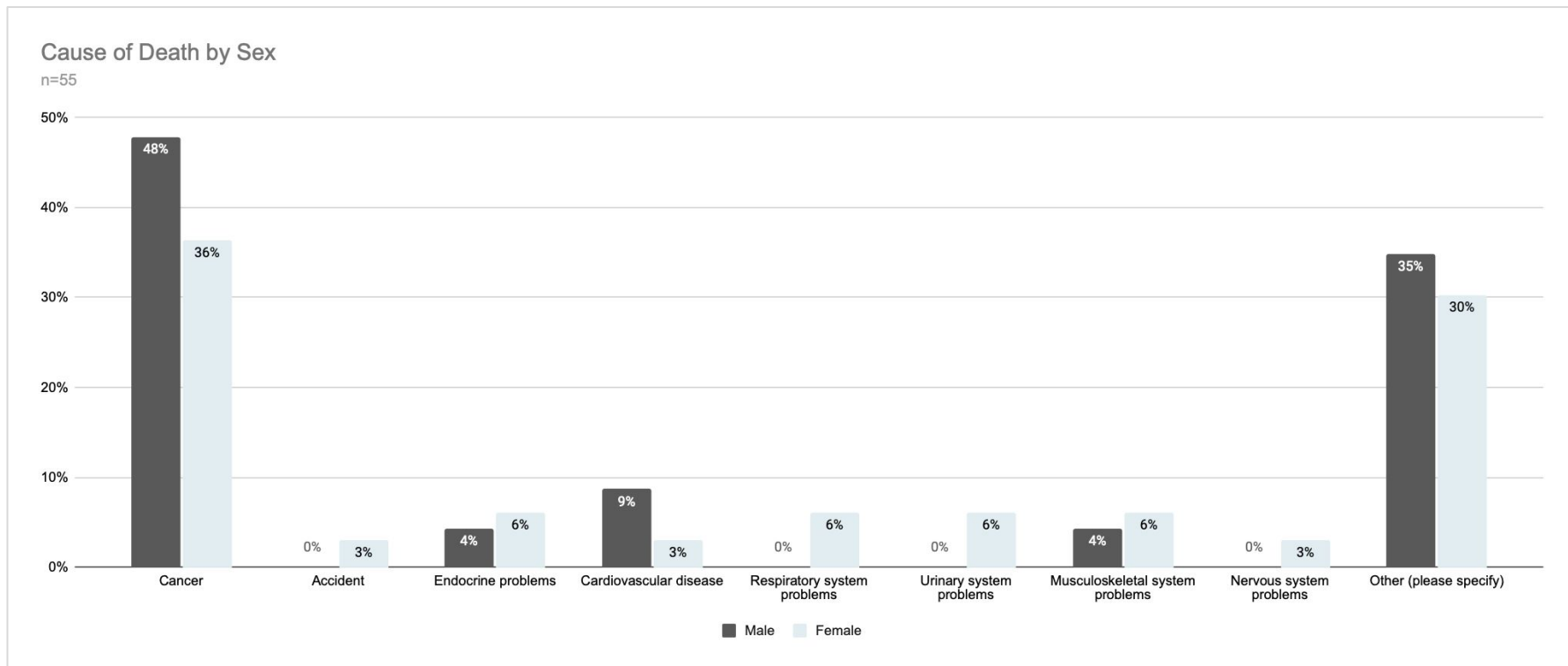
# MALE DEATHS PEAK AT 9 Y.O. WHILE FEMALE DEATHS PEAK LATER, AT 10 Y.O.



# 40% OF DEATHS ARE ATTRIBUTABLE TO CANCER



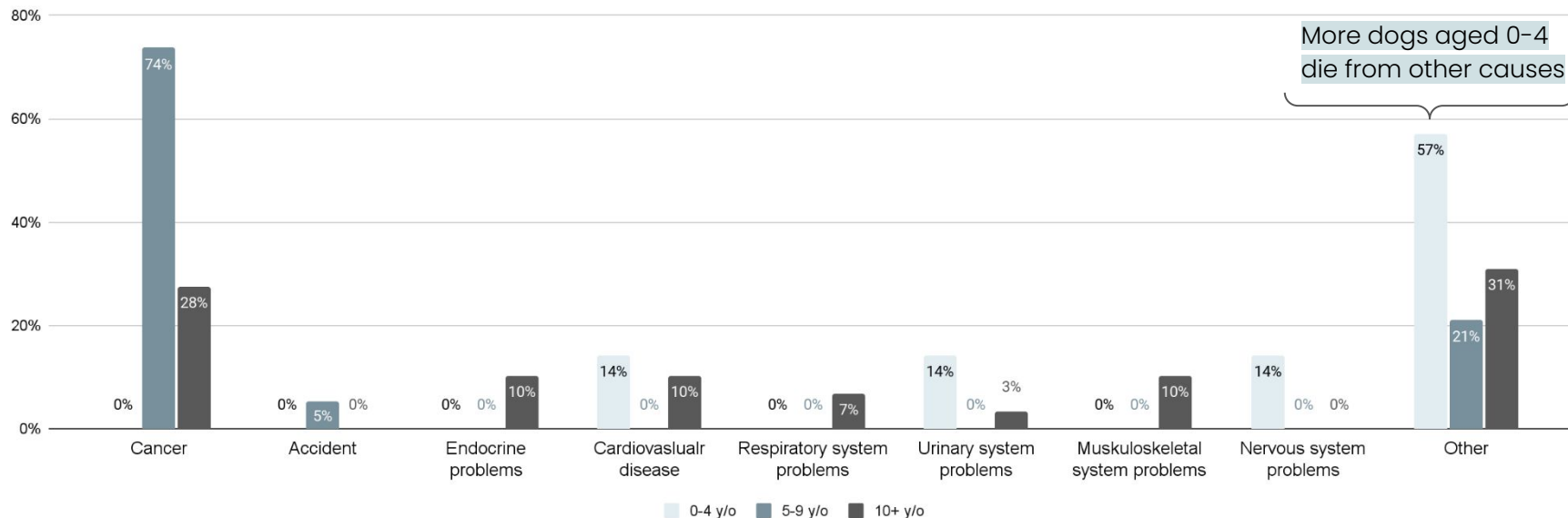
# 48% OF MALES DEATHS WERE CAUSED BY CANCER VS. 36% AMONG FEMALES



# AMONG DOGS AGED 5 TO 9, MOST DEATHS ARE ATTRIBUTABLE TO CANCER

Cause of Death by Age Range

n=55

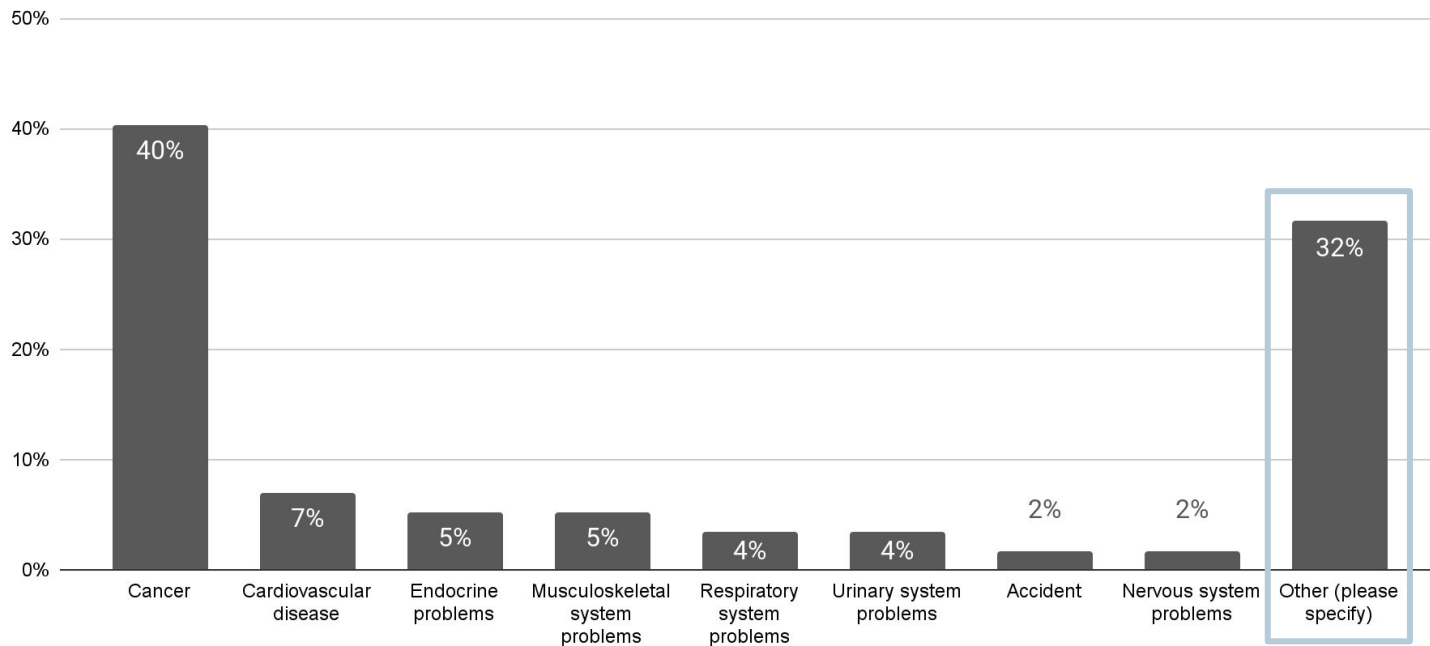




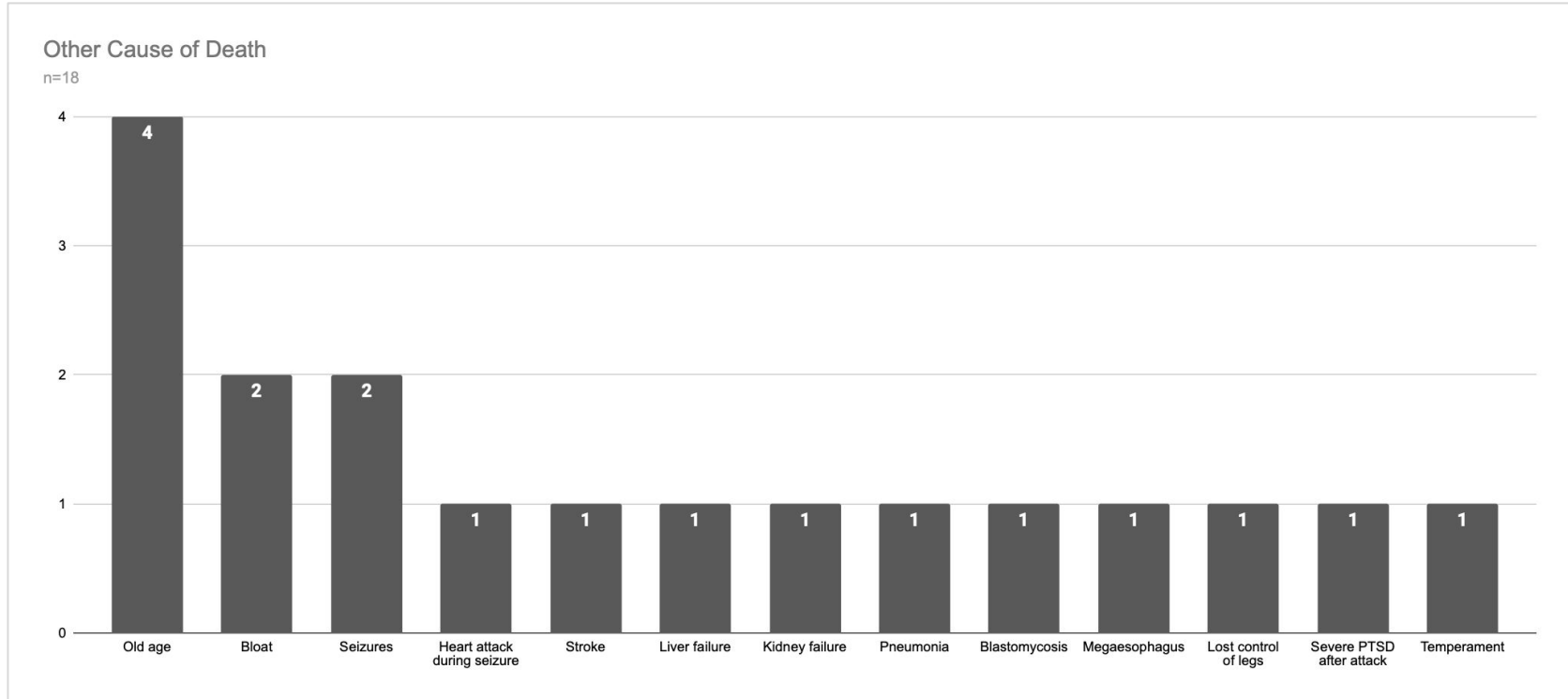
# CAUSE OF DEATH – ALL DOGS

## Cause of Death

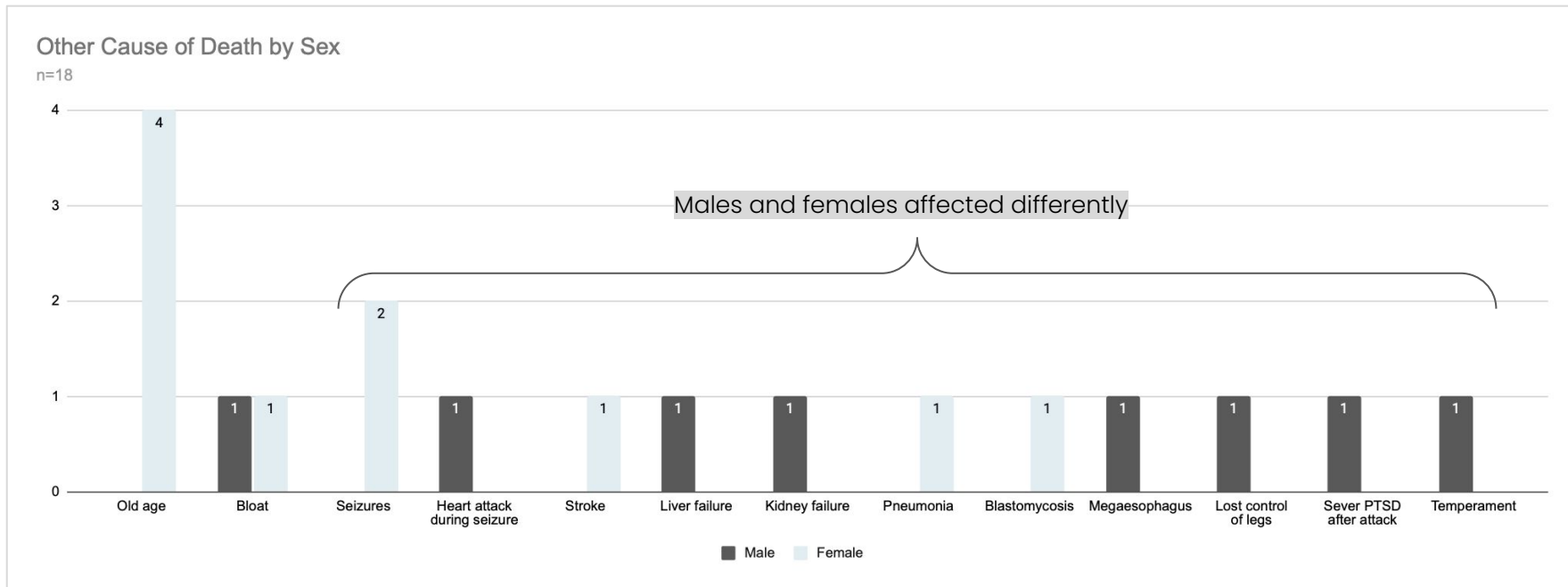
n=57



# OTHER MAIN CAUSES OF DEATH REPORTED ARE OLD AGE, FOLLOWED BY BLOAT AND SEIZURES



# OTHER CAUSES OF DEATH ARE SCATTERED AND DIFFERENT BY SEX, WHILE NO MALE DIED OF OLD AGE



# CAUSE OF DEATH : OVERALL VIEW

**Cancer**  
**40 %** (n=23)

**Cardiovascular  
disease**  
**7 %** (n=4)

**Old age**  
**7 %** (n=4)

**Musculoskeletal  
system problems**  
**5 %** (n=3)

**Endocrine  
problems**  
**5 %** (n=3)

**Respiratory  
system problems**  
**4 %** (n=2)

**Urinary system  
problems**  
**4 %** (n=2)

**Seizures**  
**4 %** (n=2)

**Bloat**  
**4 %** (n=2)

**Accident**  
**2 %**  
(n=1)

**Heart attack  
during seizure**  
**2 %**  
(n=1)

**Stroke**  
**2 %**  
(n=1)

**Liver  
failure**  
**2 %**  
(n=1)

**Kidney  
failure**  
**2 %**  
(n=1)

**Pneumonia**  
**2 %**  
(n=1)

**Blastom  
ycosis**  
**2 %**  
(n=1)

**Megaeso  
phagus**  
**2 %**  
(n=1)

**Lost control  
of legs**  
**2 %**  
(n=1)

**Sever PTSD  
after attack**  
**2 %**  
(n=1)

**Tempera  
ment**  
**2 %**  
(n=1)

**Nervous  
system  
problems**  
**2 %**  
(n=1)

# Health Problems

# FOR EACH MAIN CATEGORY OF HEALTH PROBLEMS



## **Portrait of the actual situation**

How many dogs are/were affected?  
High-level breakdown by sex and by age



## **Statement about age at onset**

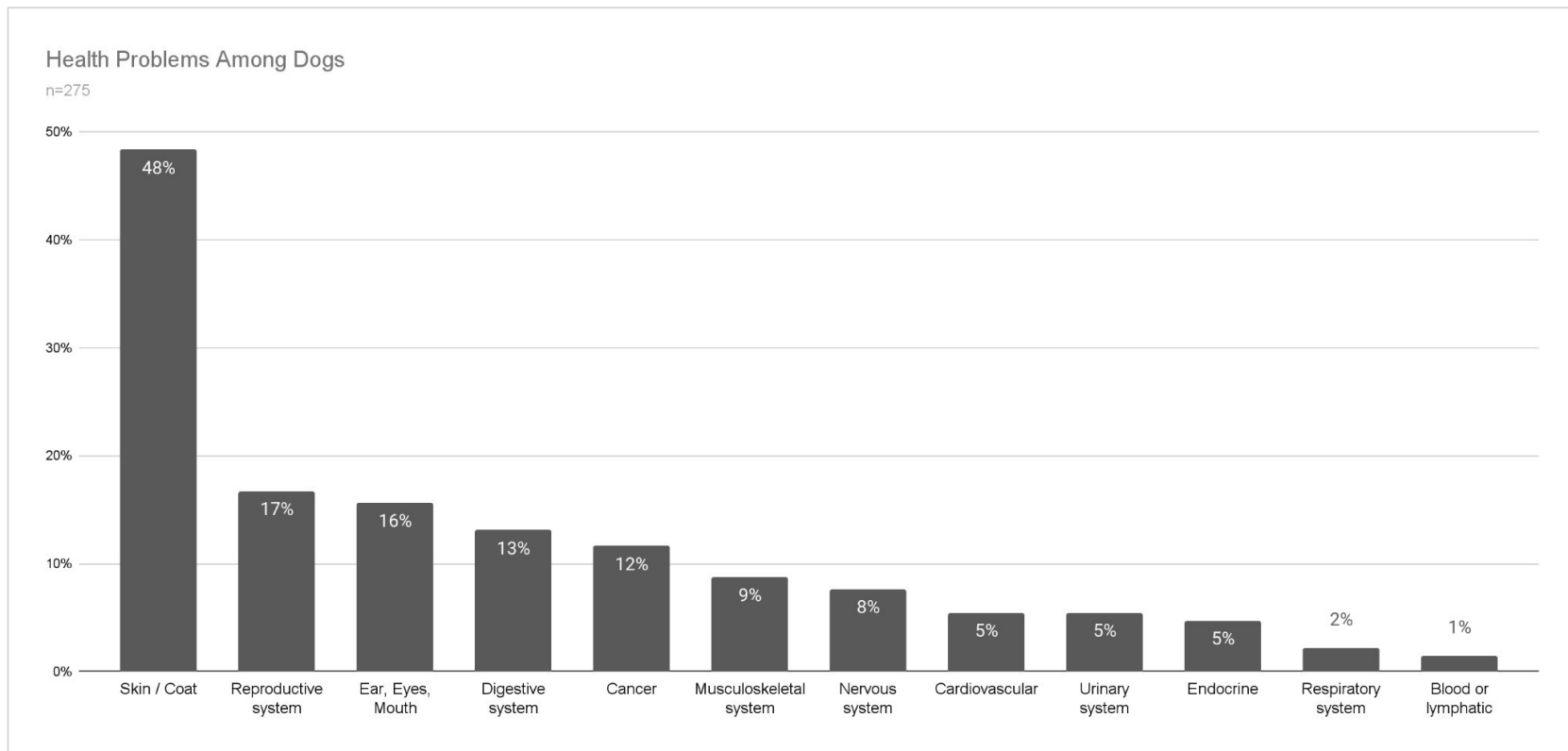
When did the condition/symptoms first appear?



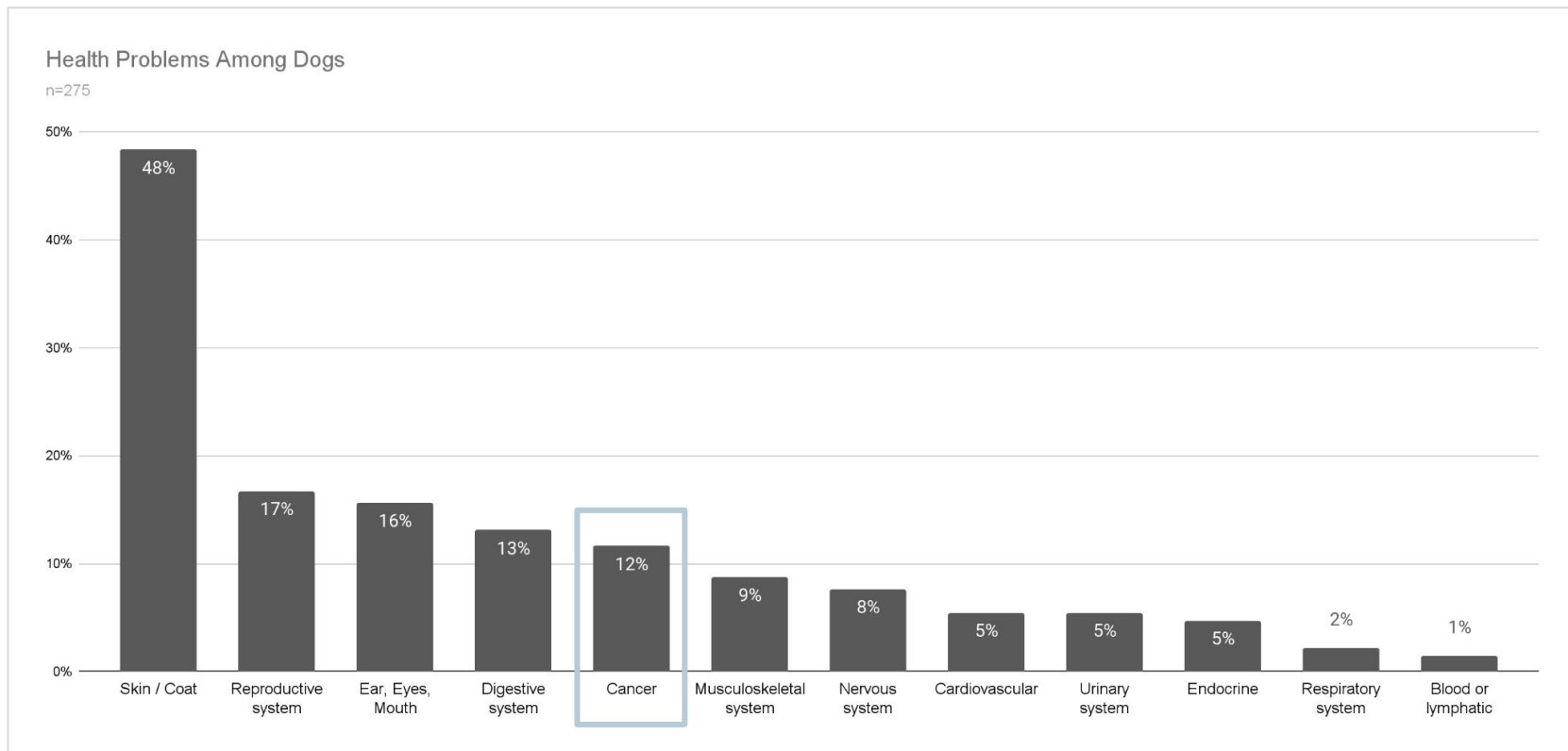
## **Diagnosis information**

Who performed it? How was it confirmed?

# HEALTH PROBLEMS AMONG OTTERHOUNDS



# HEALTH PROBLEMS AMONG OTTERHOUNDS





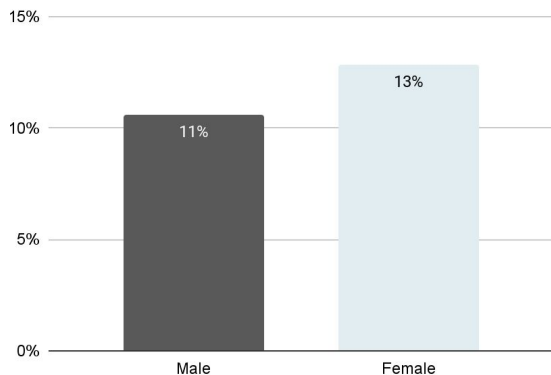
# PREVALENCE OF CANCER IS SIMILAR AMONG MALES AND FEMALES (INDEPENDENTLY OF MORTALITY)



Cancer more lethal among males.

Cancer by Sex

n=272



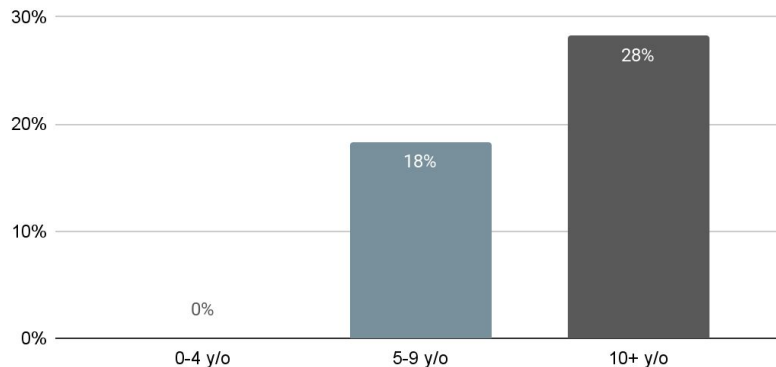
**CANCER**

**48 %** of male deaths  
**36 %** of female deaths

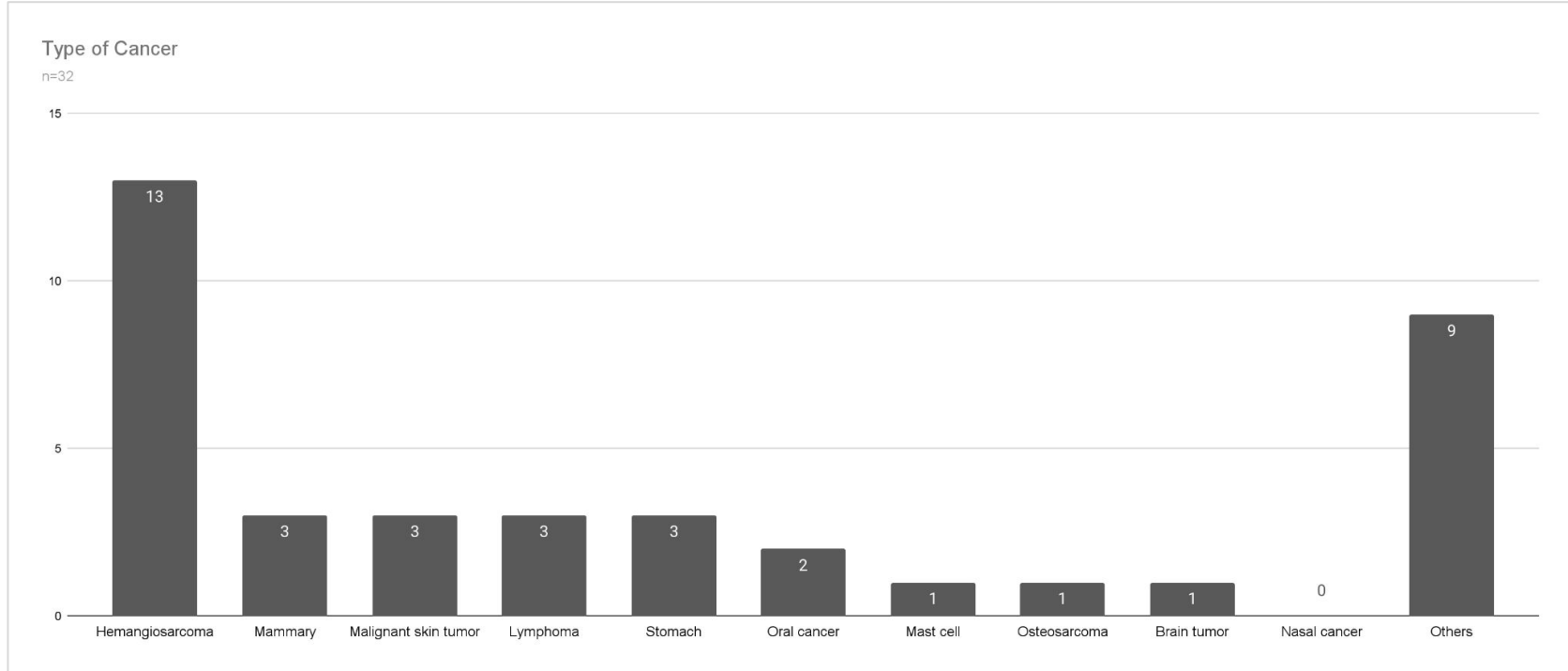
Among dogs aged 10+, cancer affects more than 1 in 4.

Cancer by Age Range

n=258



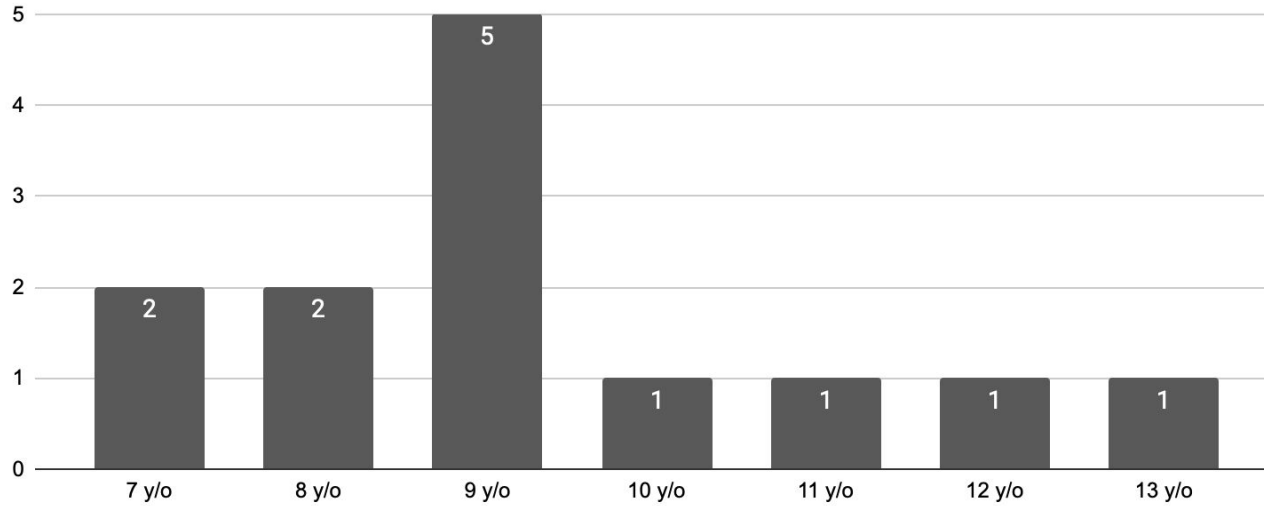
# HEMANGIOSARCOMA IS THE MOST COMMON TYPE OF CANCER



# PEAK OF APPEARANCES OF HEMANGIOSARCOMA AT 9 YEARS OLD

Age at Onset (Hemangiosarcoma)

n=13



No cases of hemangiosarcoma have been discovered at 6 years old and under – first appearances occurred at 7.

After the peak at 9 years old, cases are rarer and reach a plateau at 10+.

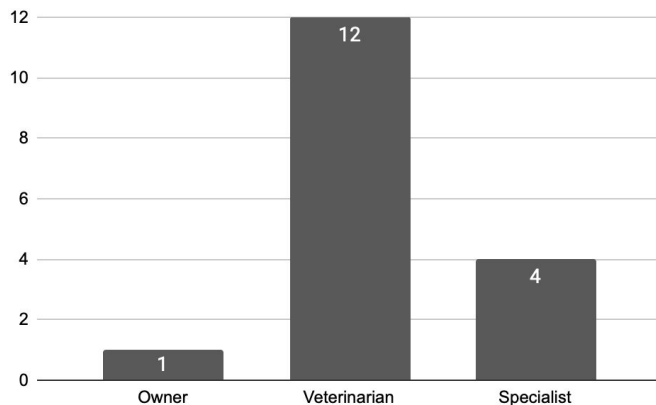
# MOST CASES OF HEMANGIOSARCOMA DIAGNOSED BY VETERINARIAN & CONFIRMED BY ULTRASOUND



In a few cases, a second opinion from a specialist supported the veterinarian's diagnosis.

Who Performed the Diagnosis (Hemangiosarcoma)

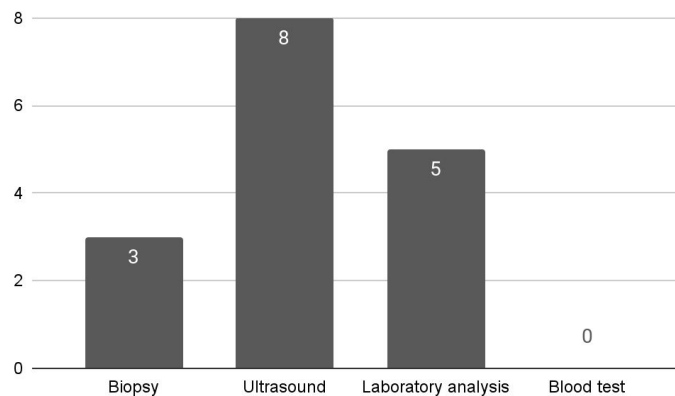
n=13



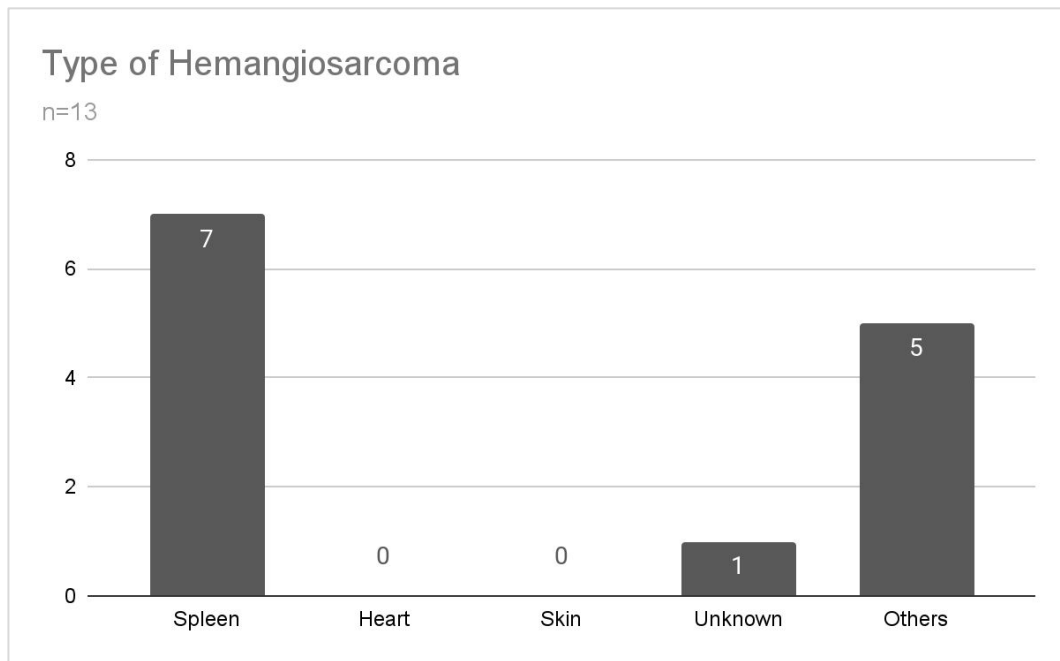
In some cases, laboratory analysis complemented ultrasound diagnosis.

Confirmation of Diagnosis (Hemangiosarcoma)

n=11



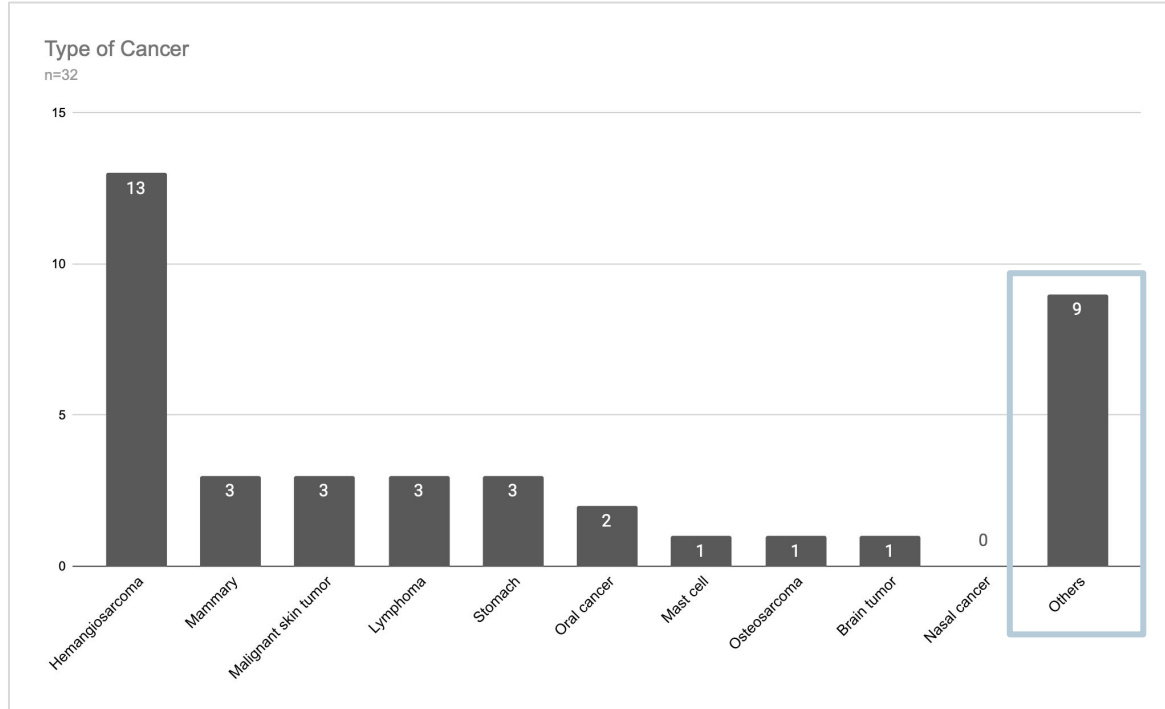
# SPLENIC HEMANGIOSARCOMA IS THE MOST COMMON FORM OF THIS CANCER



## OTHERS

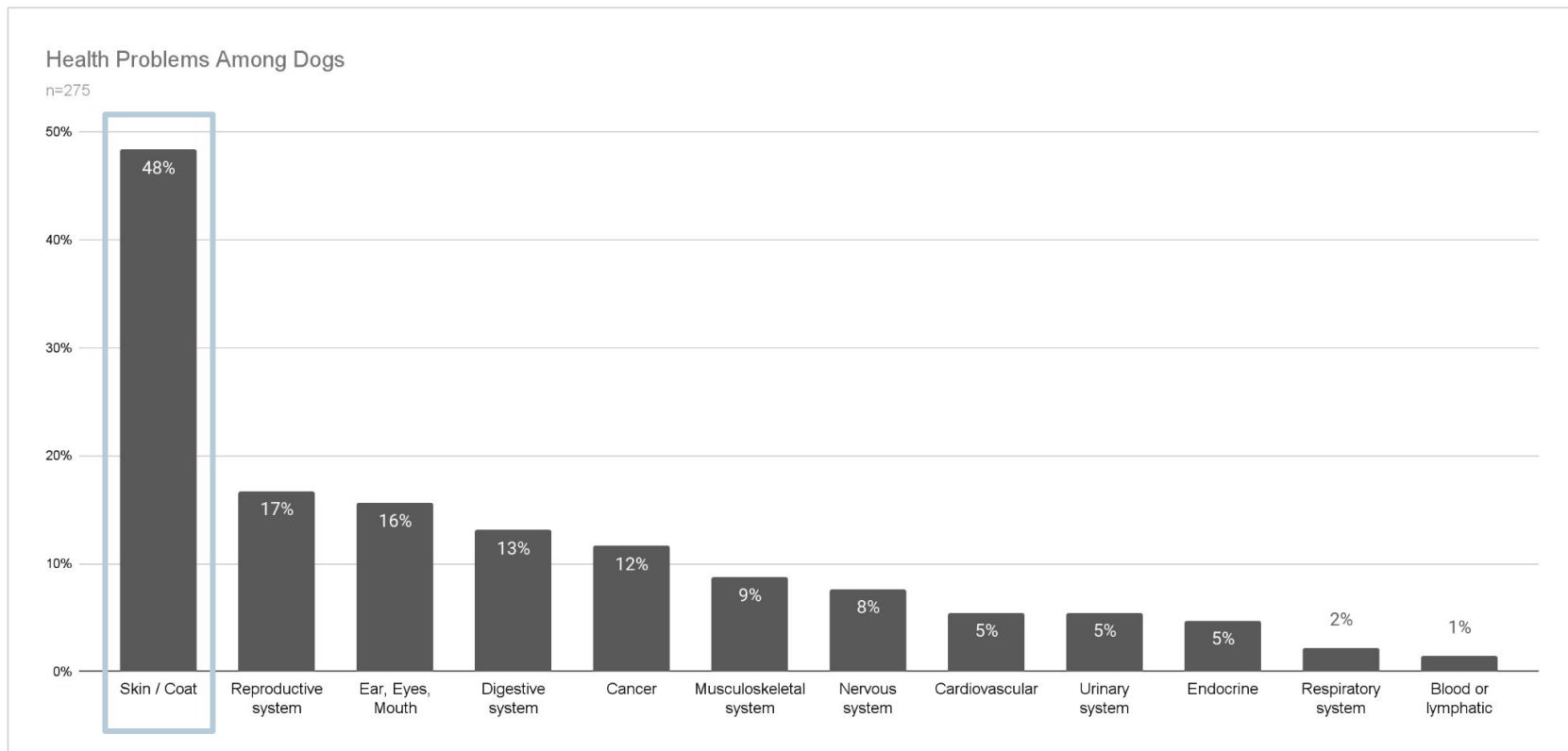
- Eye
- Everything
- Kidney
- Sarcoma with metastatic spread to liver & multilobular abdominal mass
- Cancer in soft tissues, bones, and probably lymph nodes

# OTHER TYPES OF CANCER : DIVERSITY OF KINDS

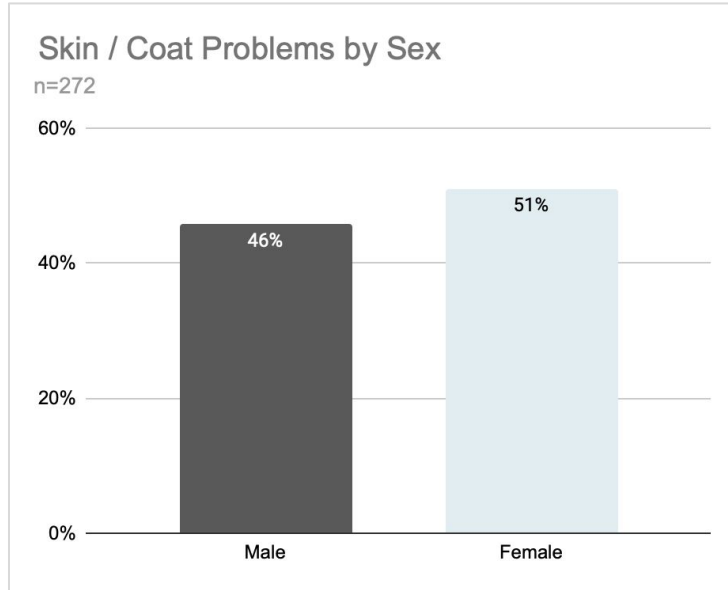


- Neuroendocrine carcinoma
- Histiocytoma
- Trichoepithelioma
- Idiopathic epilepsy
- Adenocarcinoma of ovaries
- Squamous cell carcinoma
- Cancer in anal sphincter
- Pheochromocytoma in vena cava

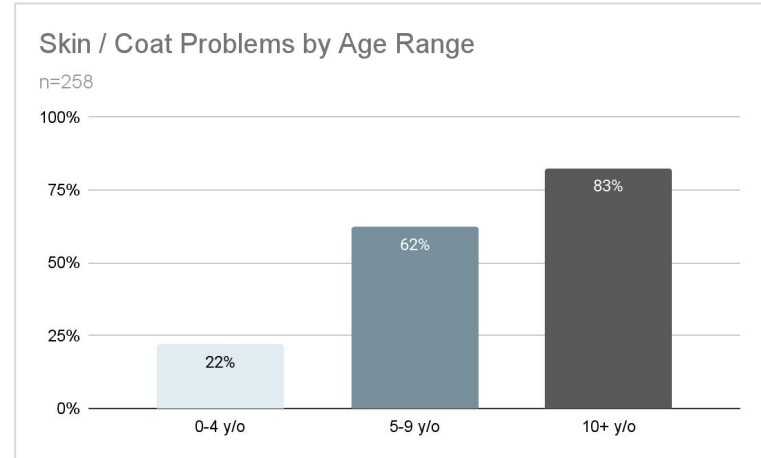
# HEALTH PROBLEMS AMONG OTTERHOUNDS



# SKIN/COAT PROBLEMS ARE QUITE COMMON AND AFFECT ABOUT HALF OF MALES & FEMALES



Skin problems affect a majority of dogs aged 5-9 and most 10+.

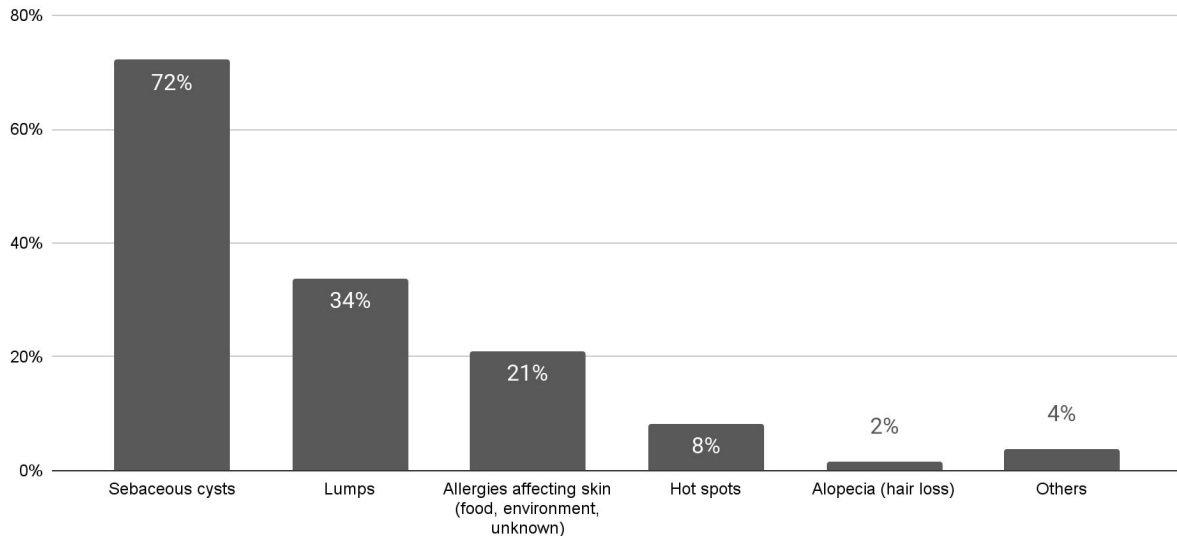




# SEBACEOUS CYSTS ARE QUITE COMMON AND REPRESENT THE MOST SIGNIFICANT SKIN PROBLEM

Type of Skin / Coat Problems

n=133



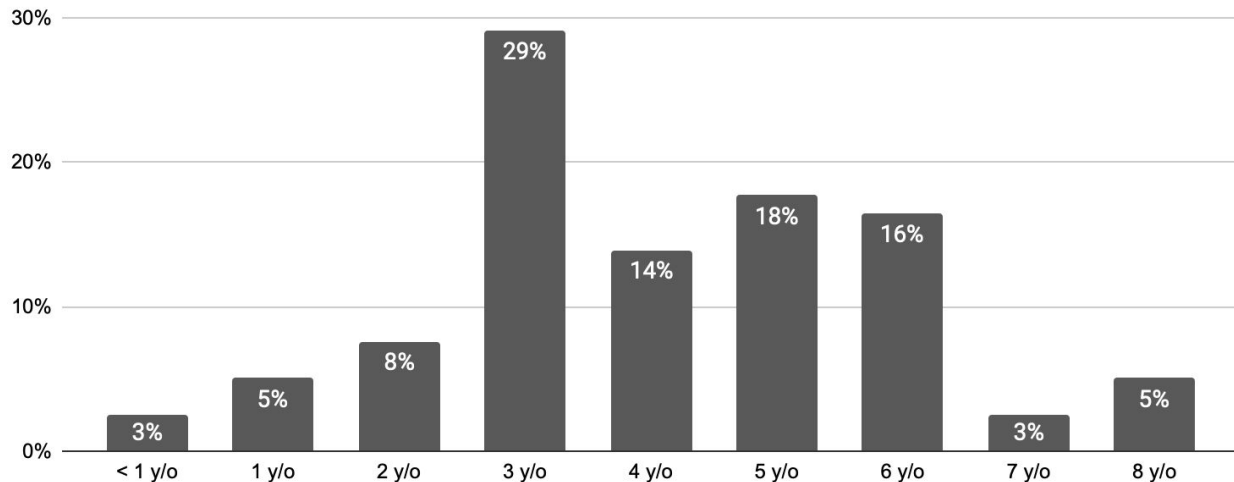
Sebaceous cysts are observed among almost 3 in 4 dogs affected by skin or coat problems.

Among the 96 dogs affected by sebaceous cysts, 28 (approx. 30 %) were also affected by lumps – the two most prevalent skin problems.

# ALMOST 1 IN 3 CASES OF SEBACEOUS CYSTS MANIFESTS AT 3 YEARS OLD

Age at Onset (Sebaceous Cysts)

n=79



Sebaceous cysts appearances peak at 3 years old.

The majority of residual cases manifest from 4 to 6.

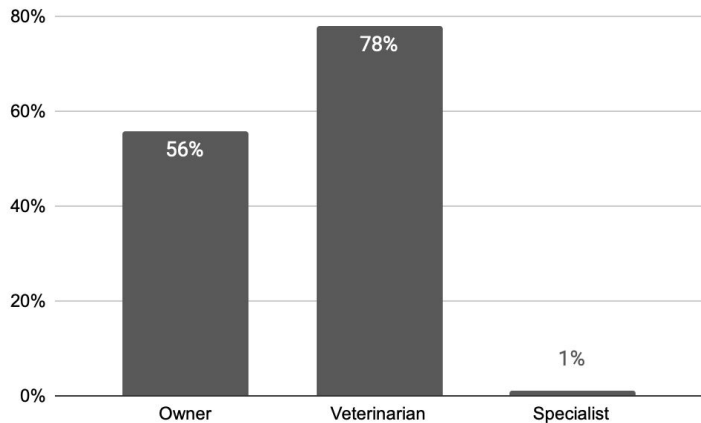
# MORE THAN 1 IN 2 CASES OF SEBACEOUS CYSTS INITIALLY IDENTIFIED BY OWNER



Most cases were confirmed by a veterinarian, sometimes to validate the owner's diagnosis.

Who Performed the Diagnosis (Sebaceous Cysts)

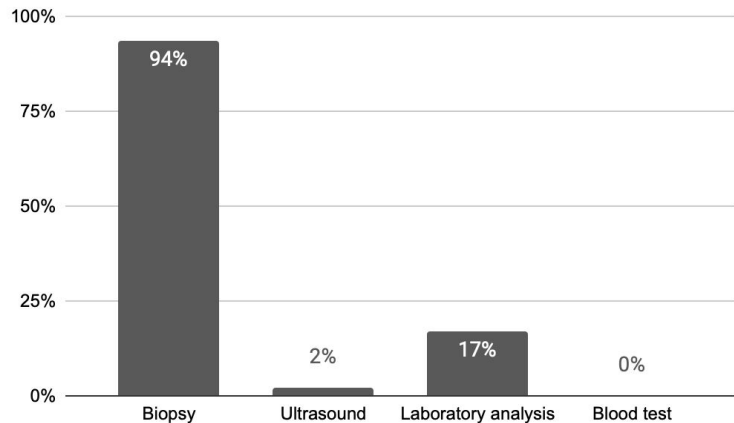
n=86



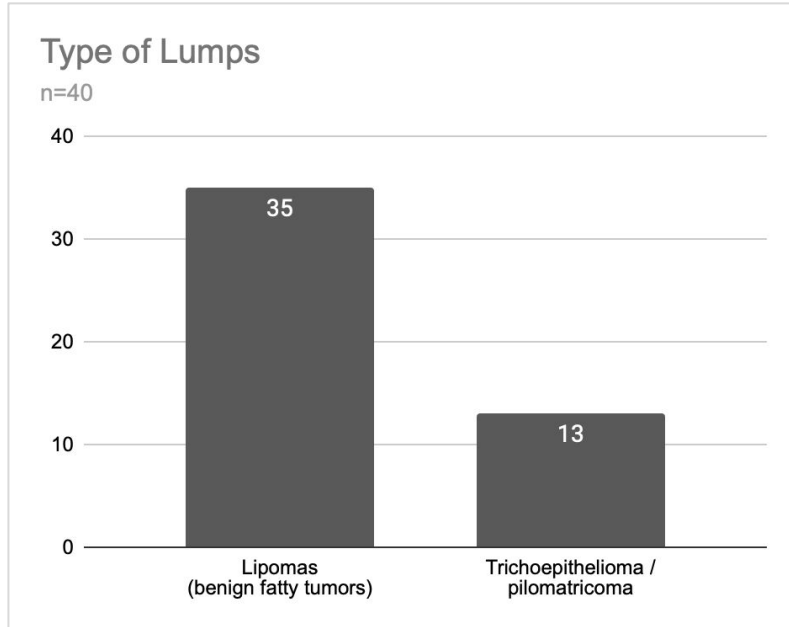
Almost all diagnosis confirmations were done by biopsy, a few having been supported by laboratory analysis.

Confirmation of Diagnosis (Sebaceous Cysts)

n=47



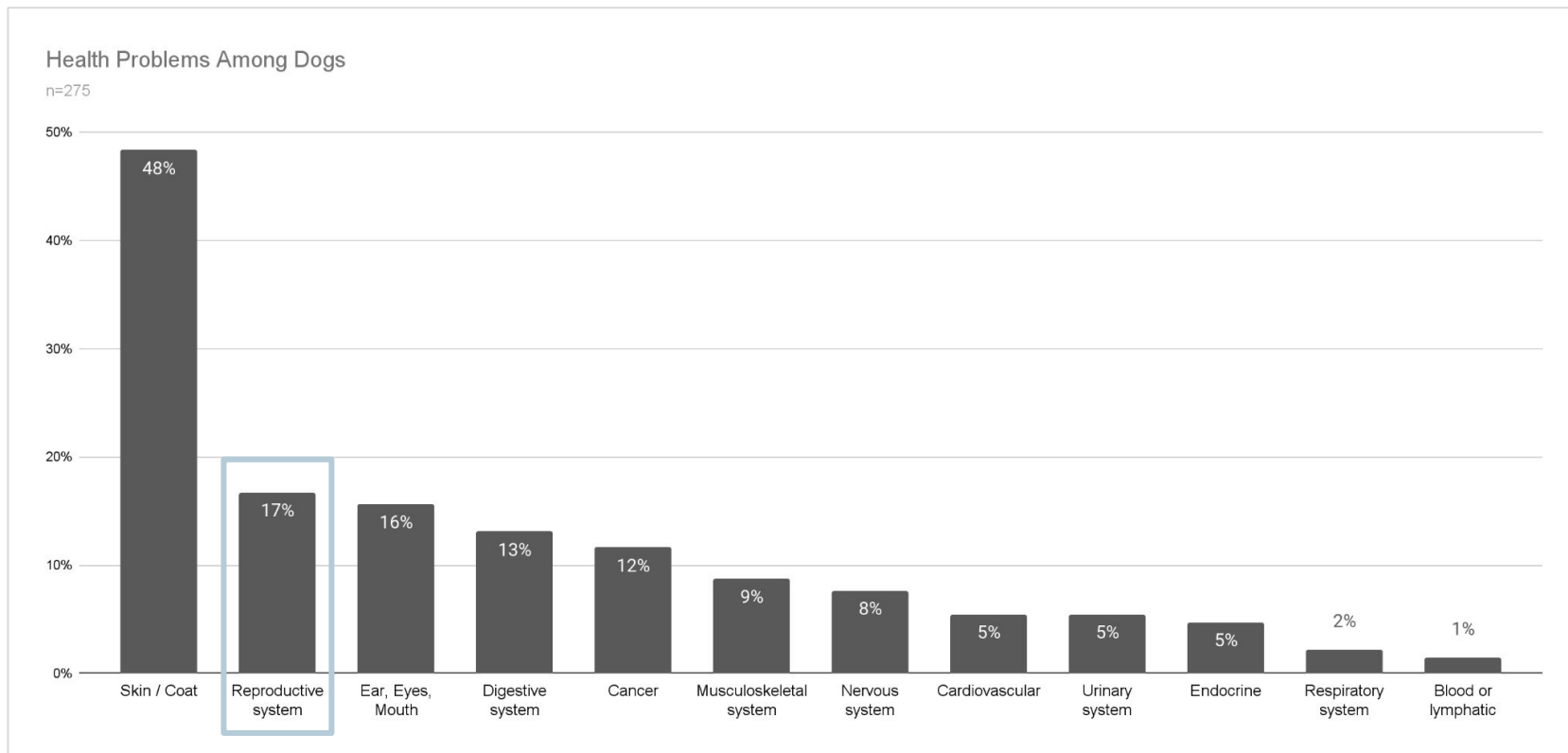
# LIPOMAS ARE THE MOST PREVALENT TYPE OF LUMPS



Lipomas account for the majority of lumps' cases.

Trichoepithelioma and pilomatricoma are the other types of lumps reported.

# HEALTH PROBLEMS AMONG OTTERHOUNDS

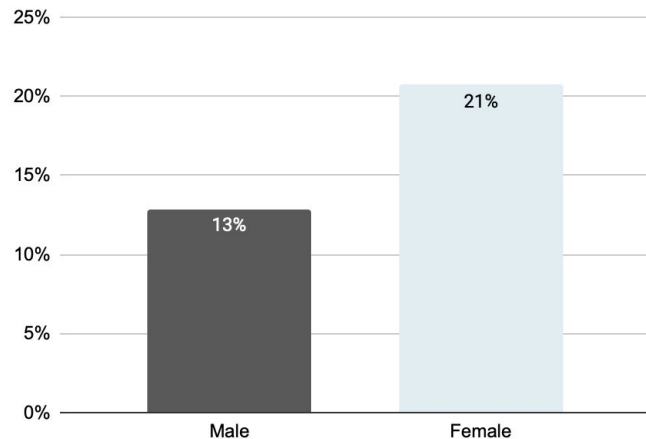


# REPRODUCTIVE SYSTEM PROBLEMS ARE MORE COMMON AMONG FEMALES, AFFECTING 1 IN 5



Reproductive System Problems by Sex

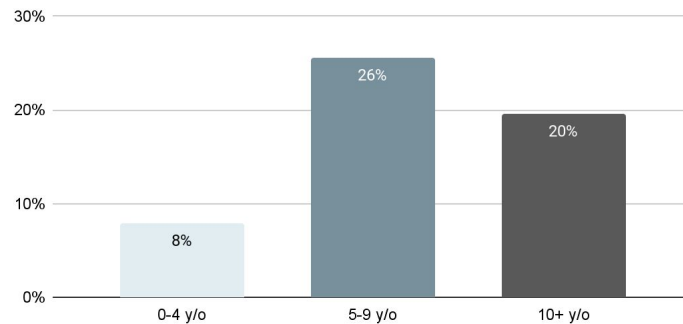
n=272



Dogs aged 5-9 are the most affected by reproductive system problems.

Reproductive System Problems by Age Range

n=258

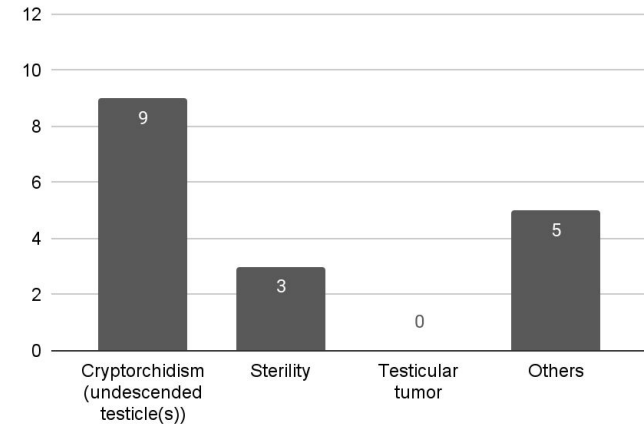


# A WIDER RANGE OF REPRODUCTIVE PROBLEMS AFFECT FEMALES THAN MALES

Cryptorchidism is the most prevalent reproductive system problem among males.

Type of Reproductive Problems - Males

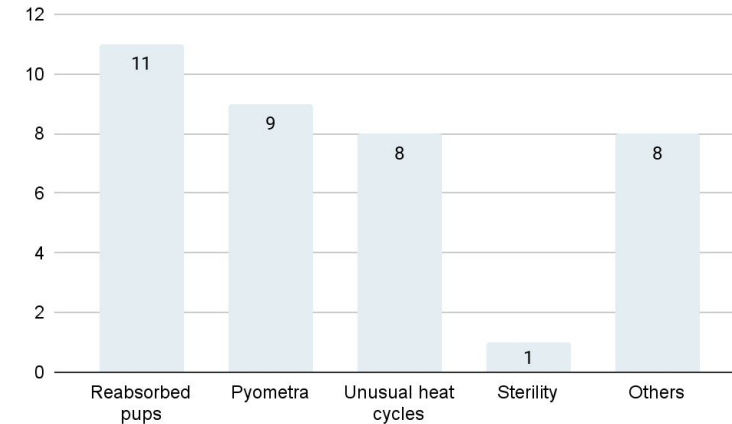
n=17



Among females, reabsorbed pups, pyometra and unusual cycle heat aren't uncommon.

Type of Reproductive Problems - Females

n=29



# MOST CASES OF CRYPTORCHIDISM WERE DIAGNOSED BY A VETERINARIAN

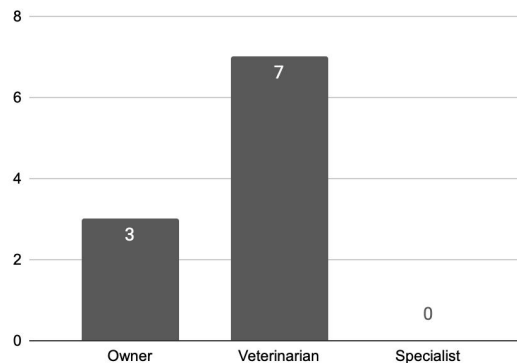


All 9 cases of cryptorchidism were identified under 1 year old.



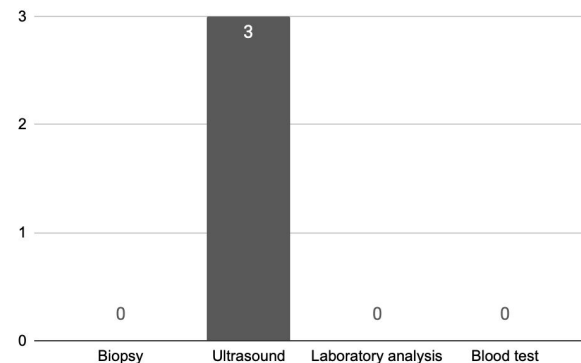
Who Performed the Diagnosis (Cryptorchidism)

n=9



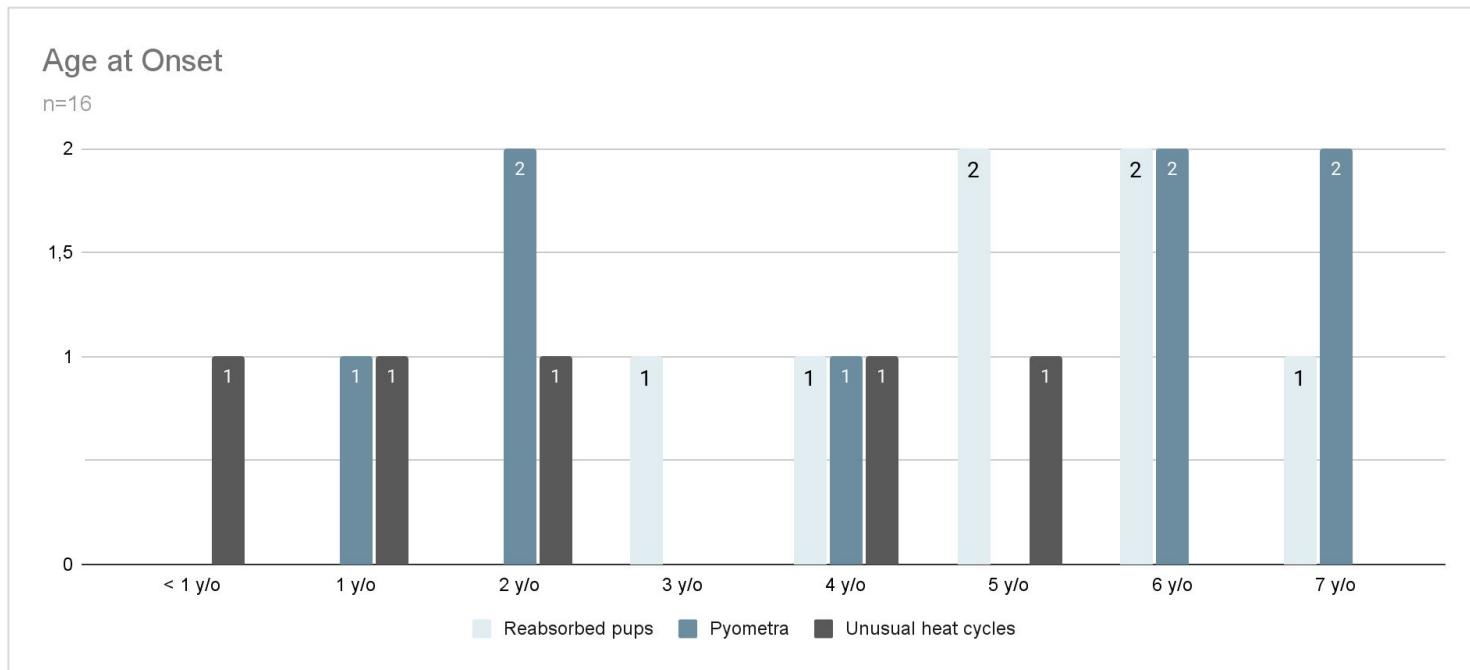
Confirmation of Diagnosis (Cryptorchidism)

n=3





# APPEARANCES OF MAIN FEMALE REPRODUCTIVE PROBLEMS ARE SCATTERED THROUGH THE AGES



Reabsorbed pups seem to appear slightly after pyometra and unusual heat cycles.

# SIMILAR DIAGNOSIS PATTERNS TO CONFIRM REABSORBED PUPS & PYOMETRA

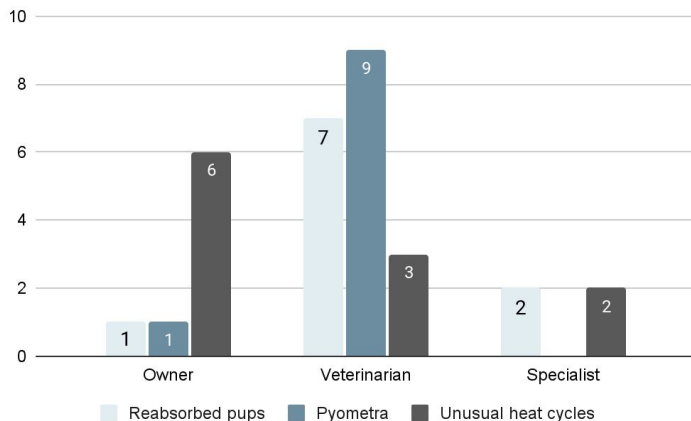


Unusual heat cycles are mainly discovered by the owner, while the vast majority of cases of reabsorbed pups & pyometra are diagnosed by a veterinarian.

Unusual heat cycles are confirmed by laboratory analysis & blood test, while most cases of reabsorbed pups & pyometra are confirmed by ultrasound.

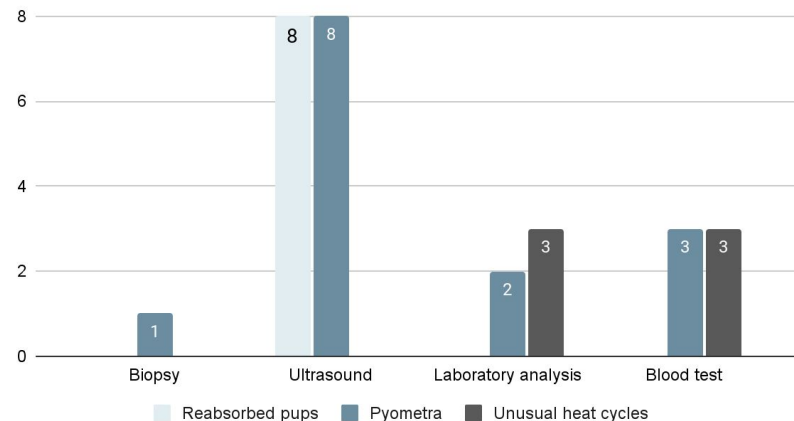
## Who Performed the Diagnosis

n=19

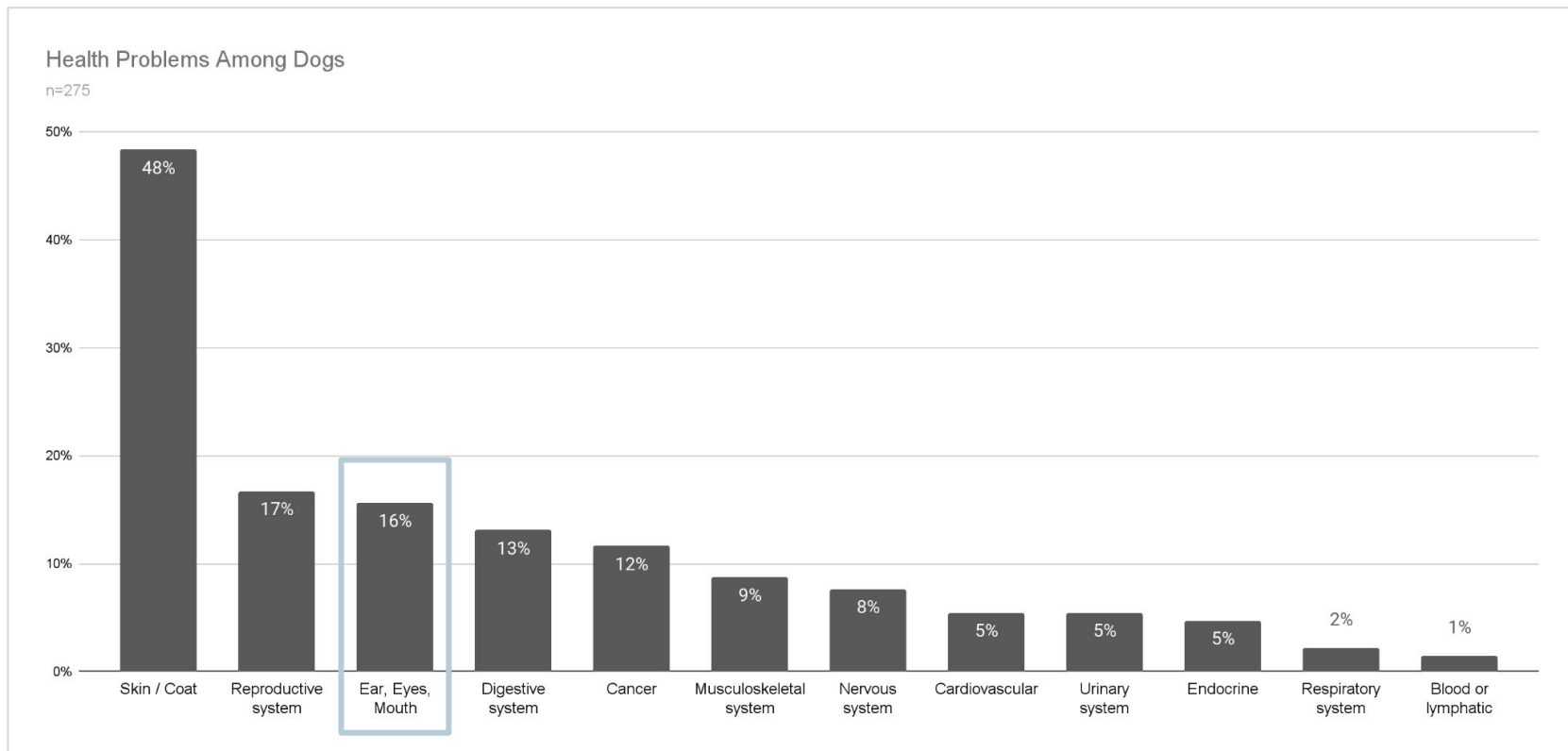


## Confirmation of Diagnosis

n=16



# HEALTH PROBLEMS AMONG OTTERHOUNDS

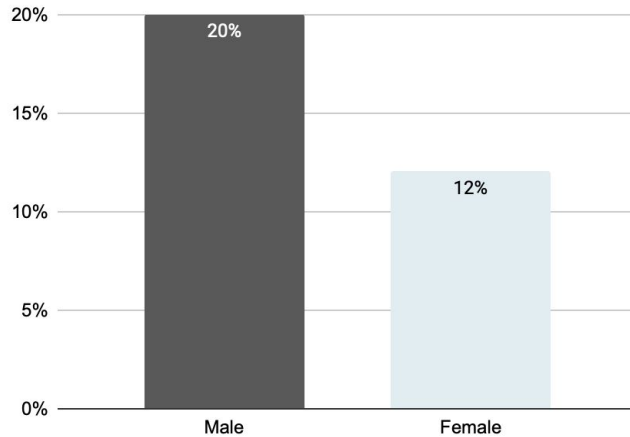


# EARS/EYES/MOUTH PROBLEMS ARE MORE COMMON AMONG MALES, AFFECTING 1 IN 5



Ears, Eyes or Mouth Problems by Sex

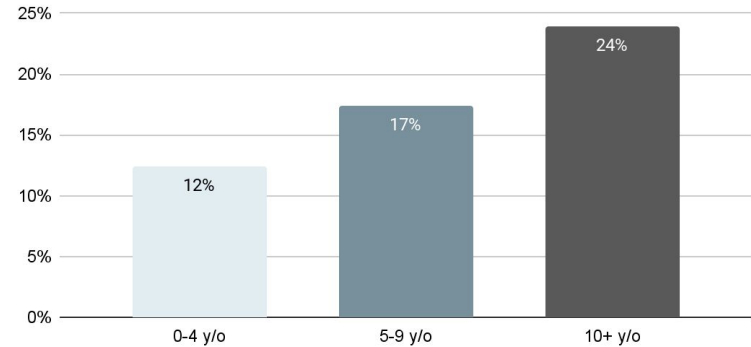
n=271



Eyes, ears or mouth problems increase with age.

Eyes, Ears or Mouth Problems by Age Range

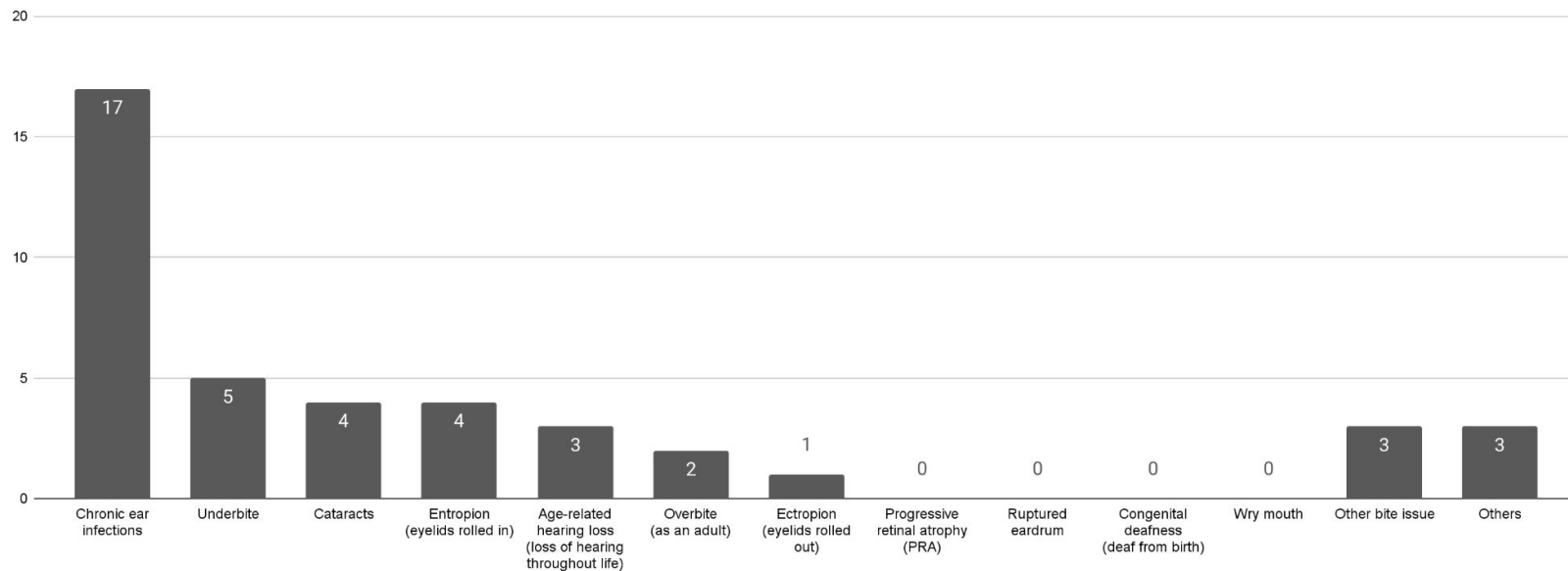
n=257



# CHRONIC EAR INFECTIONS ARE THE MOST NOTABLE EARS/EYES/MOUTH PROBLEMS

Type of Ears, Eyes, Mouth Problems

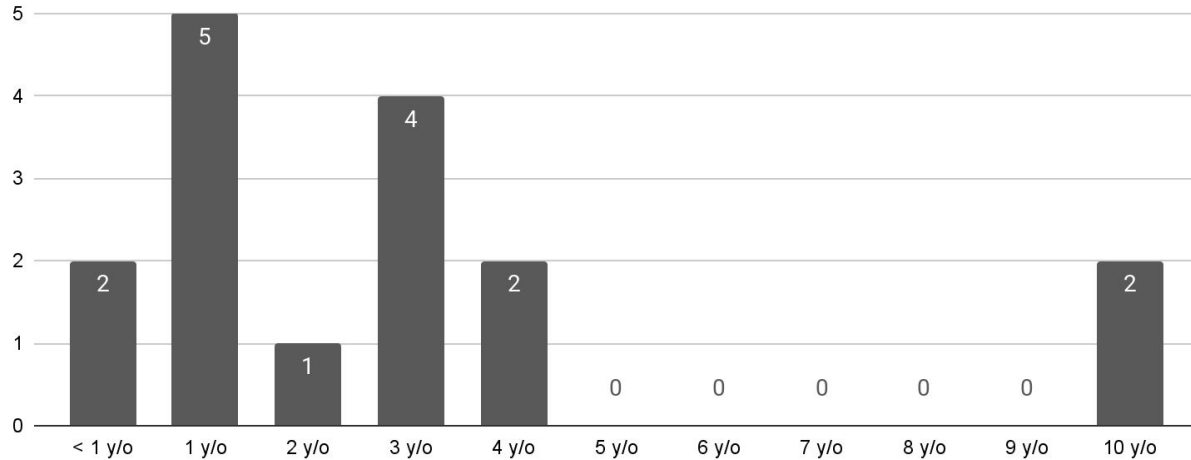
n=43



# PEAK OF CHRONIC EAR INFECTIONS APPEARANCES AT 1 YEAR OLD

Age at Onset (Chronic Ear Infections)

n=16



There is a secondary peak of cases appearing at 3 years old.

No cases were observed from 5 to 9 years old.

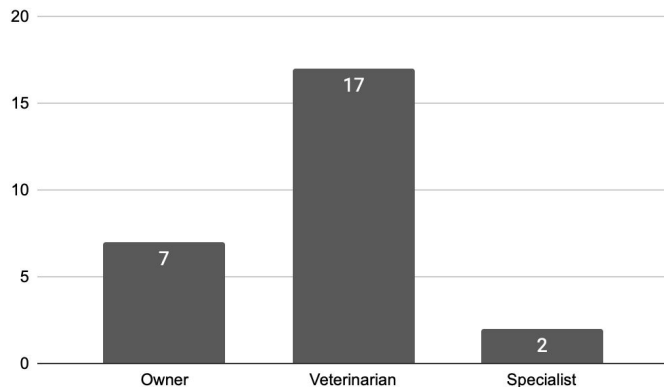
# ALL REPORTED CASES OF CHRONIC EAR INFECTIONS DIAGNOSED BY A VETERINARIAN



While some cases were discovered by the owner, all were confirmed by a veterinarian.

Who Performed the Diagnosis (Chronic Ear Infections)

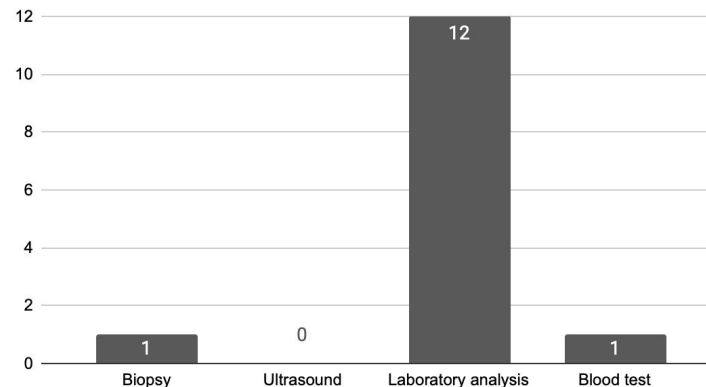
n=17



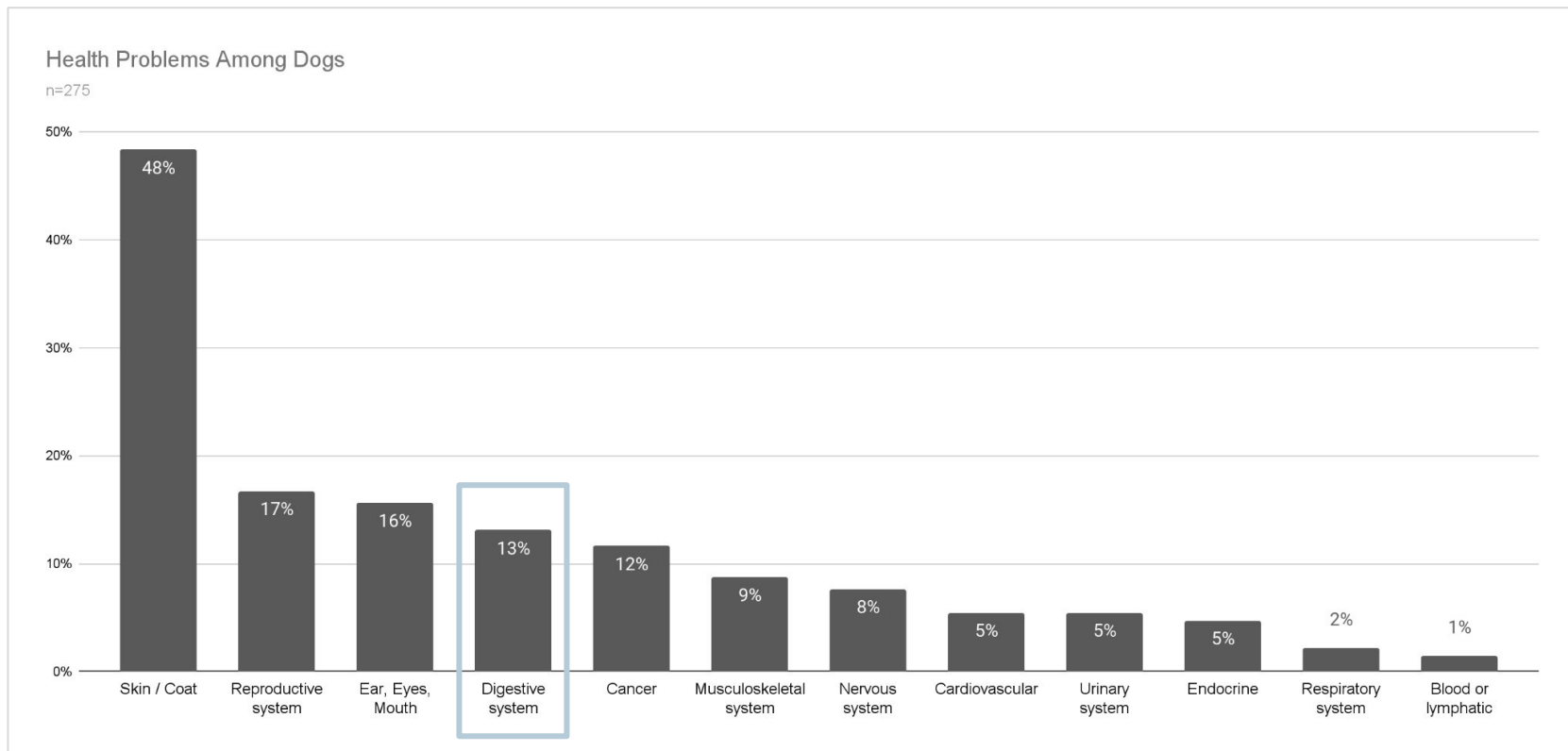
All reported diagnosis confirmations were through laboratory analysis.

Confirmation of Diagnosis (Chronic Ear Infections)

n=12



# HEALTH PROBLEMS AMONG OTTERHOUNDS



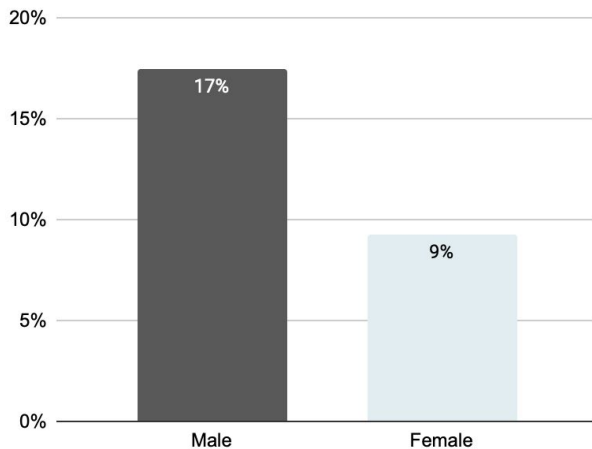


# DIGESTIVE SYSTEM PROBLEMS AFFECT TWICE AS MANY MALES AS FEMALES



Digestive System Problems by Sex

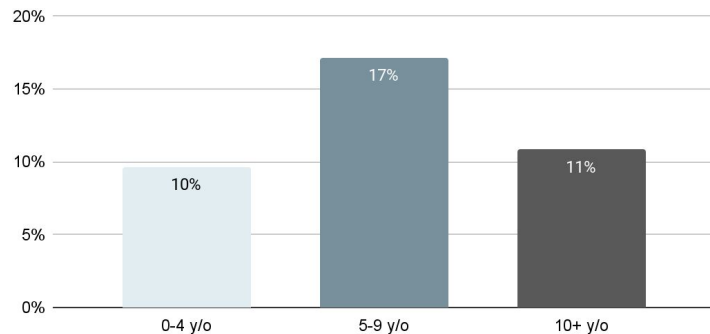
n=273



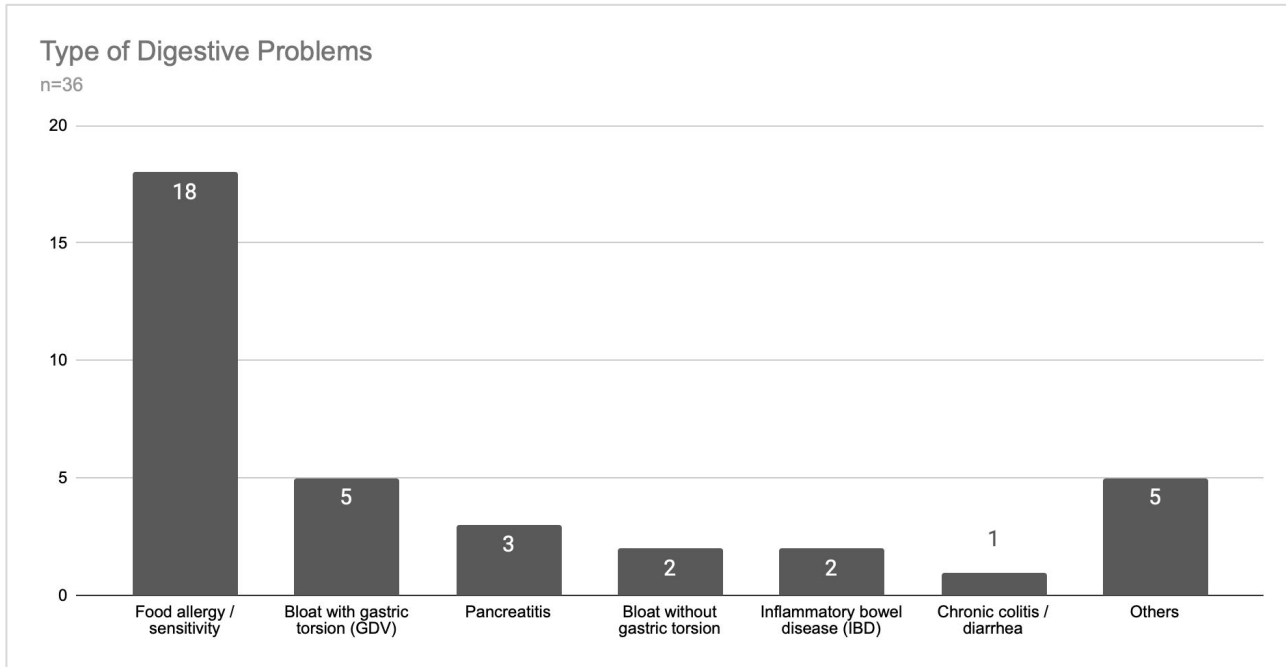
Dogs aged 5-9 are the most affected by digestive system problems.

Digestive System Problems by Age Range

n=259



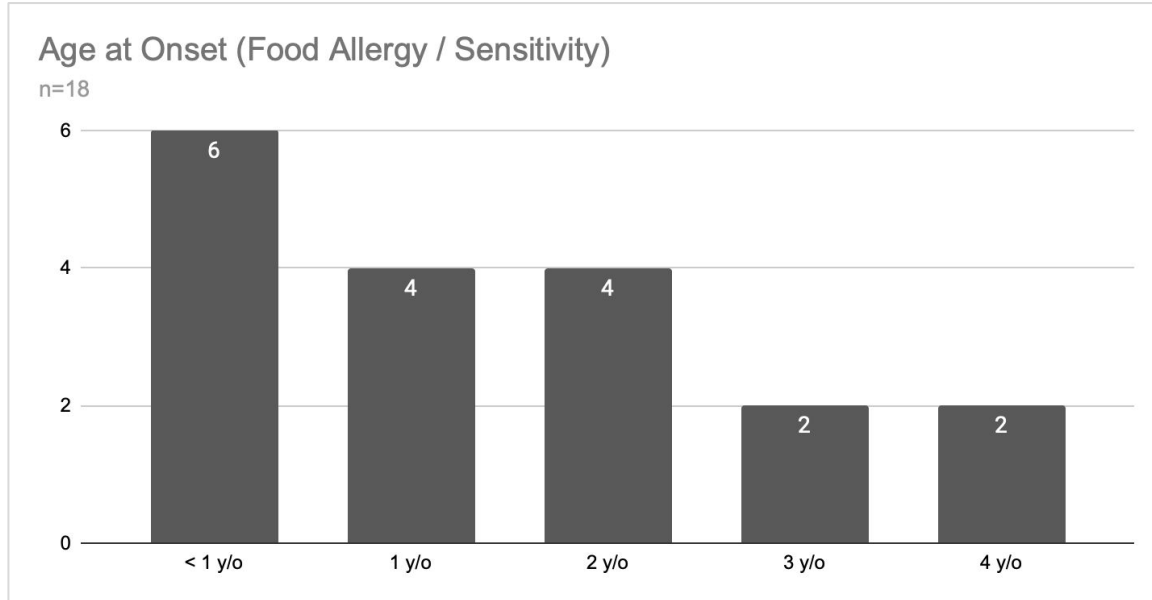
# FOOD ALLERGY/SENSITIVITY IS THE MOST PREVALENT TYPE OF DIGESTIVE PROBLEMS



Food allergy or sensitivity is observed among 1 in 2 dogs affected by digestive problems.

Other types of digestive problems are less common.

# APPEARANCES OF FOOD ALLERGY/SENSITIVITY CASES PEAK UNDER 1 YEAR OLD AND DECREASE WITH AGE



No cases were observed  
at 5+ years old.

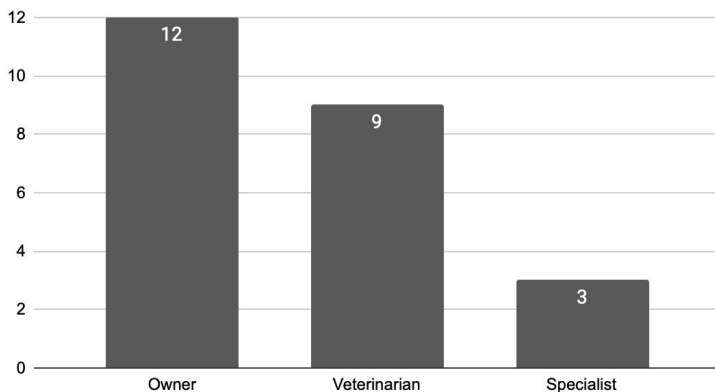
# MOST CASES OF FOOD ALLERGY/SENSITIVITY INITIALLY DISCOVERED BY OWNER



Most cases were discovered by the owner – sometimes with the support of a second opinion from a veterinarian, or more rarely, of a specialist.

Who Performed the Diagnosis (Food Allergy / Sensitivity)

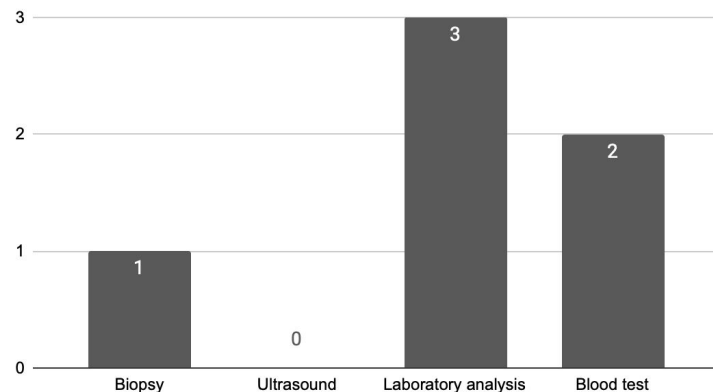
n=17



The few diagnosis confirmations reported were all done through laboratory analysis at some point.

Confirmation of Diagnosis (Food Allergy / Sensitivity)

n=3



# DOGS WITH CHRONIC EAR INFECTIONS ARE MORE THAN TWICE AS AFFECTED BY DIGESTIVE PROBLEMS

**13 %**

of dogs surveyed have  
**digestive problems**

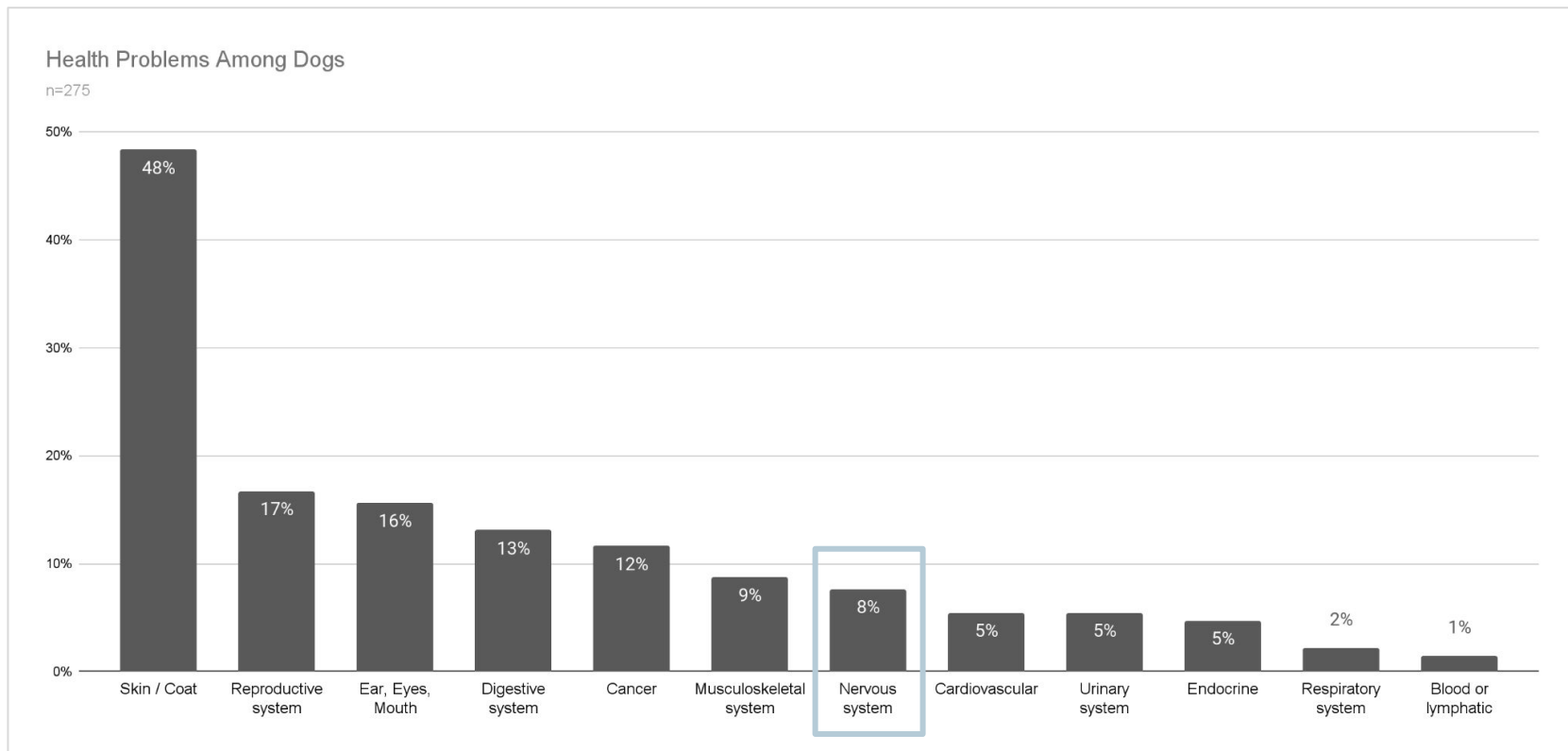
**29 %**

of dogs with  
**chronic ear infections**  
have **digestive problems**

**0 %**

of dogs with  
**hemangiosarcoma**  
have **digestive problems**

# HEALTH PROBLEMS AMONG OTTERHOUNDS

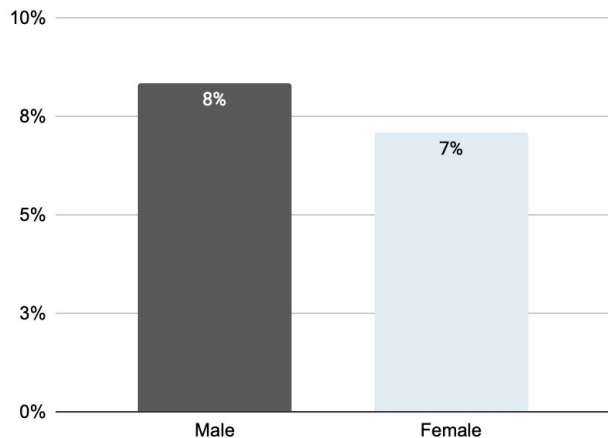


# PREVALENCE OF NERVOUS SYSTEM PROBLEMS IS SIMILAR AMONG MALES & FEMALES



Nervous System Problems by Sex

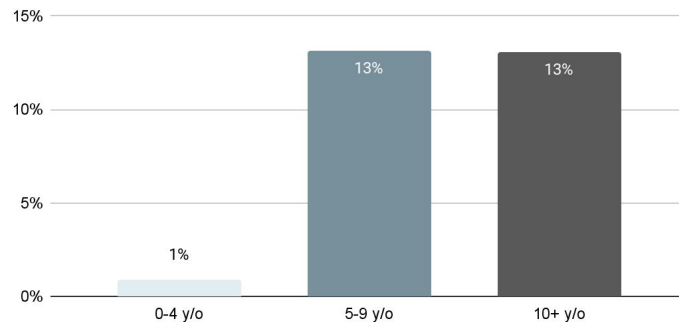
n=273



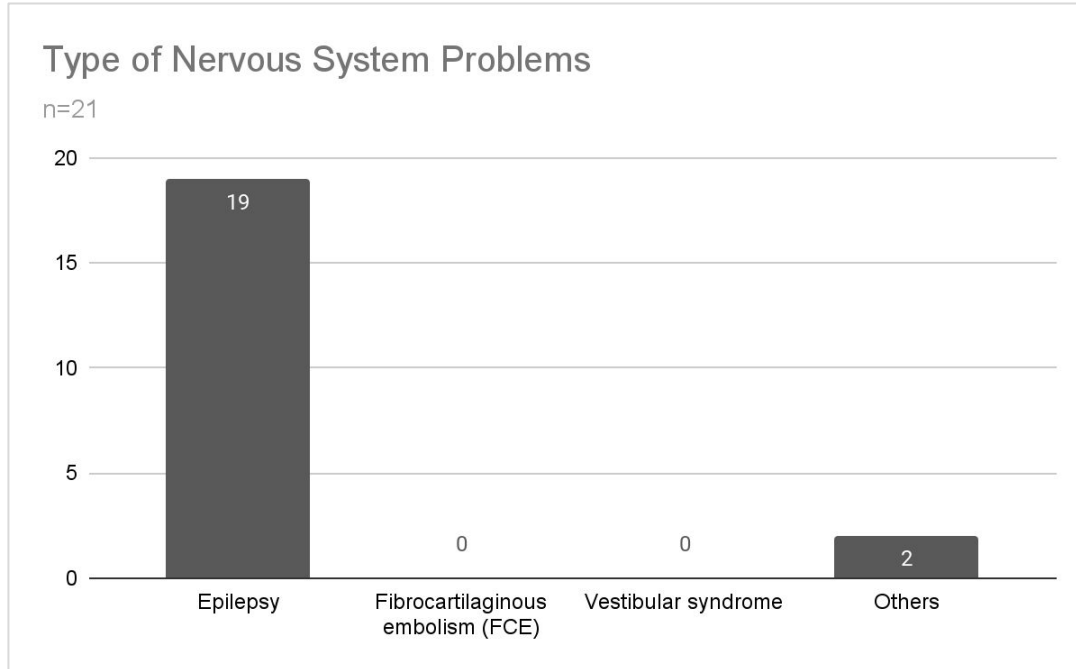
Nervous system problems similarly prevalent among dogs aged 5-9 and 10+.

Nervous System Problems by Age Range

n=259



# EPILEPSY IS THE MAIN NERVOUS SYSTEM PROBLEM REPORTED, REPRESENTING 19 CASES

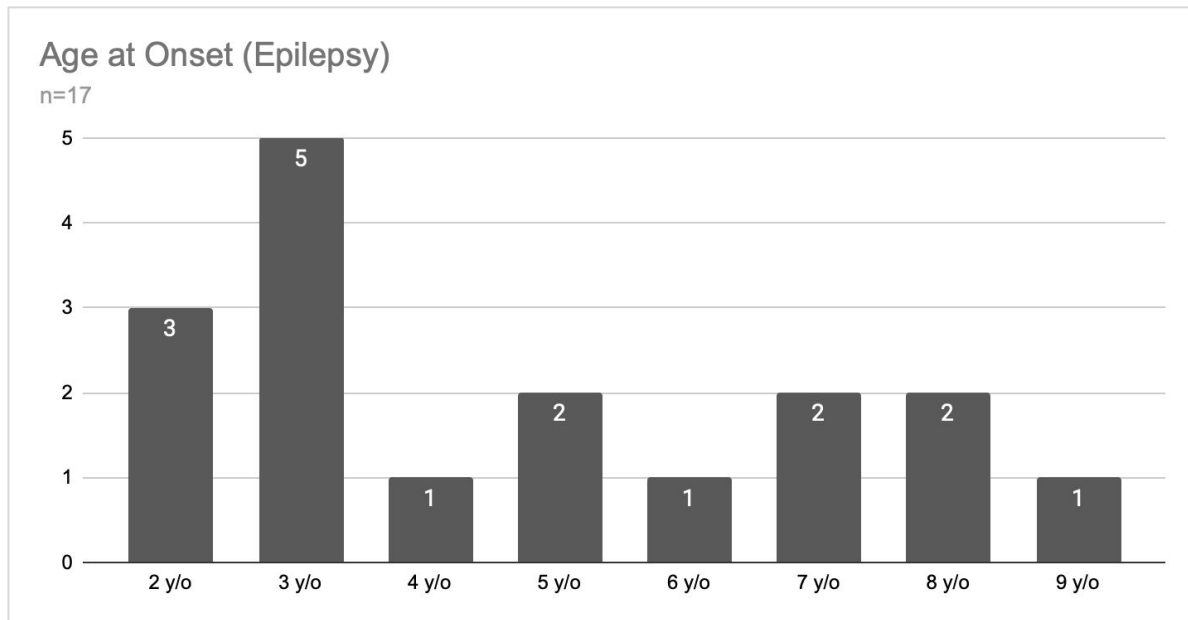


## OTHERS

- Obsessive hunting behavior
- Seizure likely related to brain tumor



# APPEARANCES OF EPILEPSY CASES PEAK AT 3 YEARS OLD AND DECREASE WITH AGE



After 3 years old, appearances of epilepsy decrease and reach a plateau.

No cases were observed at 10+ years old.

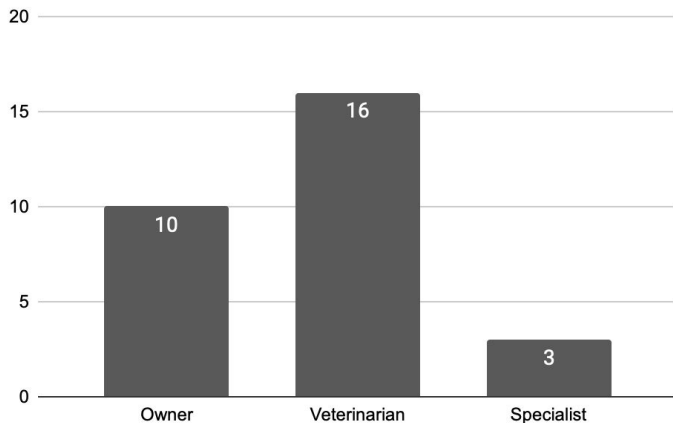
# THE VAST MAJORITY OF EPILEPSY CASES WERE CONFIRMED BY A VETERINARIAN



Almost all cases were diagnosed by a veterinarian – often to support the initial discovery of the owner.

Who Performed the Diagnosis (Epilepsy)

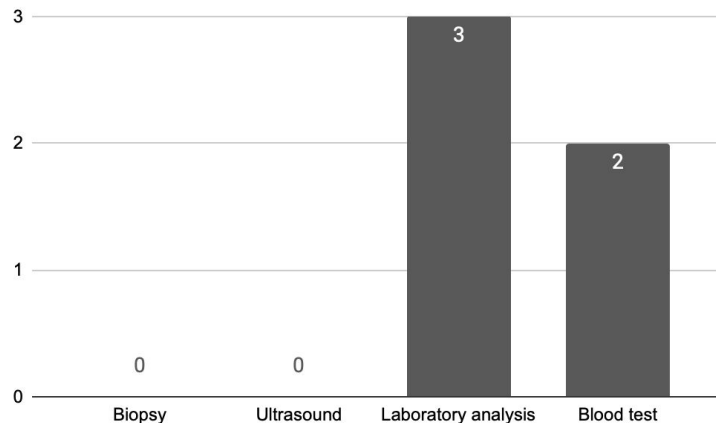
n=18



The few diagnosis confirmations reported were done through laboratory analysis and blood test.

Confirmation of Diagnosis (Epilepsy)

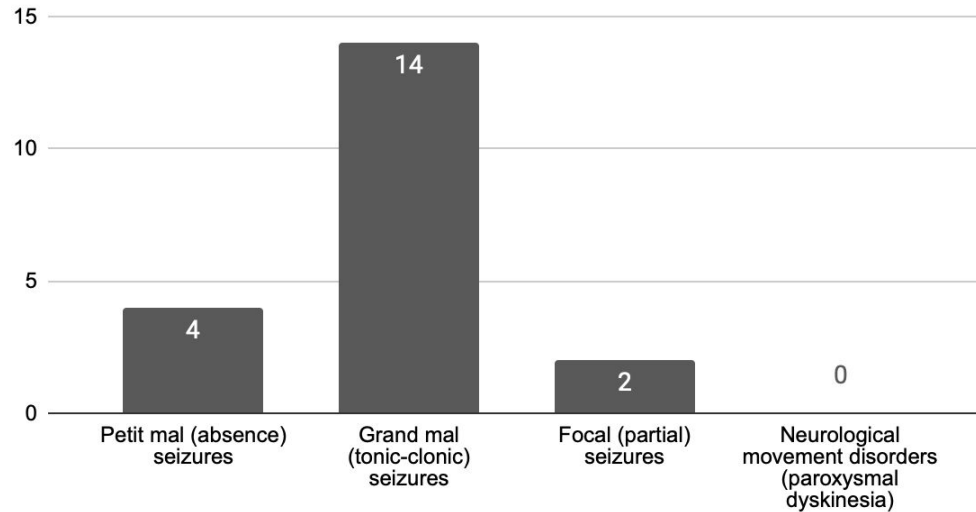
n=5



# GRAND MAL SEIZURES ARE THE MOST COMMON TYPE OF EPILEPSY

Type of Epilepsy

n=18



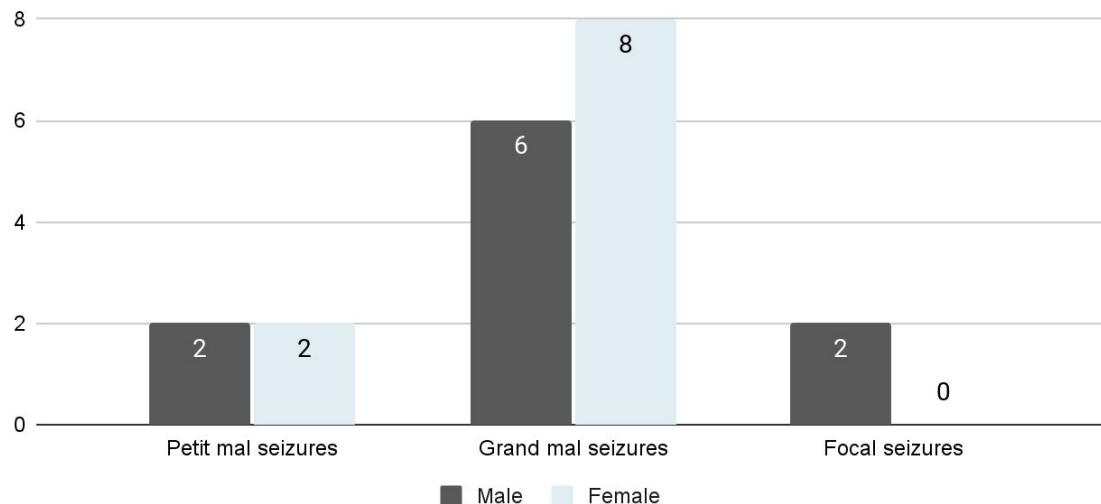
Among dogs affected by epilepsy, grand mal is the most prevalent type.

2 dogs were affected by both petit mal + grand mal seizures.

# AT FIRST GLANCE, NO MEANINGFUL DIFFERENCE BETWEEN MALES AND FEMALES REGARDING TYPES OF EPILEPSY

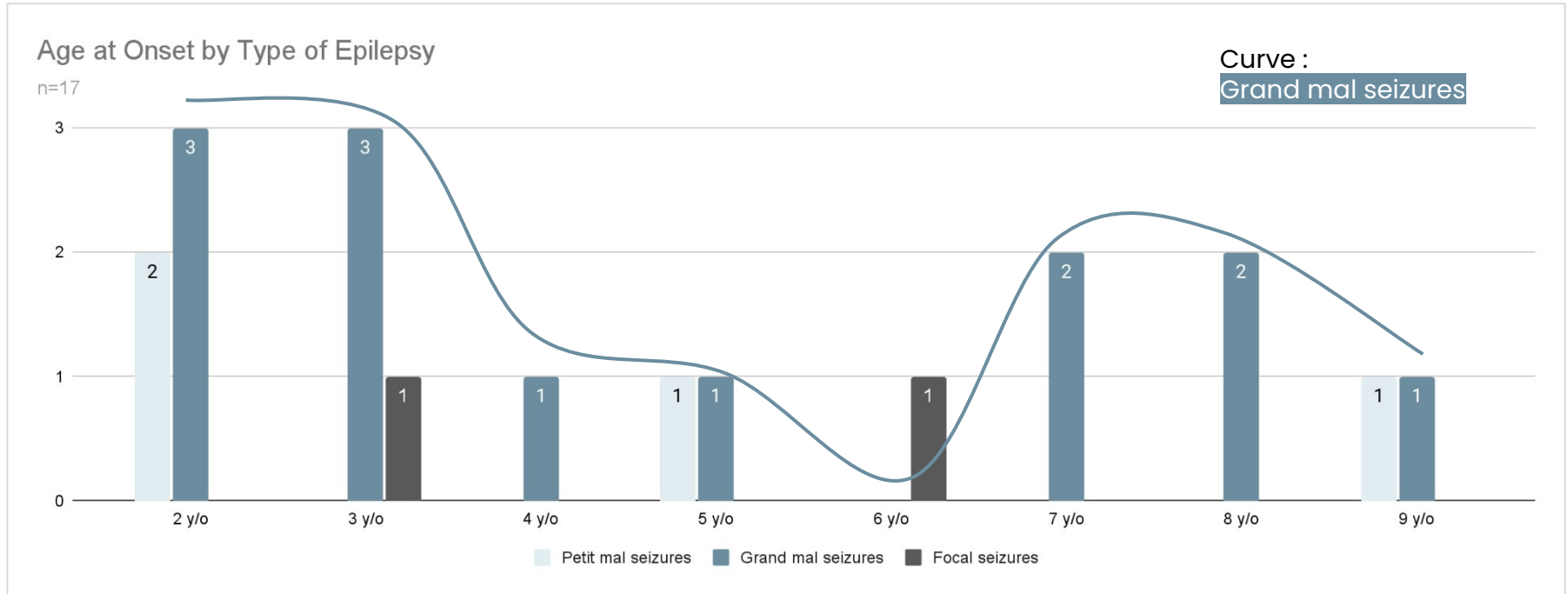
Type of Epilepsy by Sex

n=18



Grand mal seizures most common type of epilepsy among males and females.

# MOST APPEARANCES OF GRAND MAL SEIZURES APPEAR AT 3 Y.O. & YOUNGER AND 7 Y.O. & OLDER

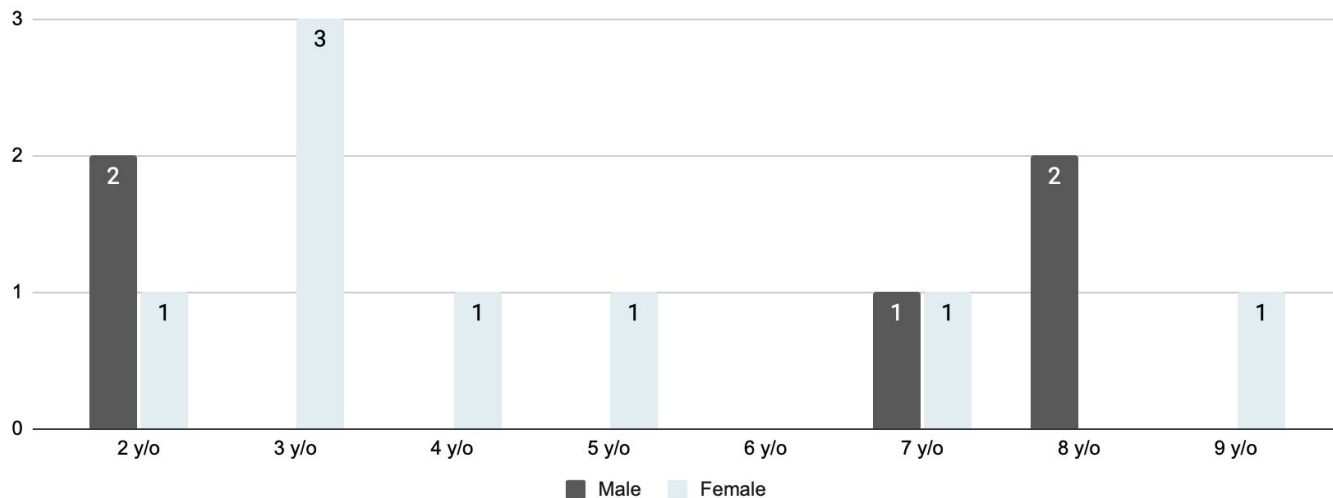


# NOT ENOUGH DATA TO DRAW CONCLUSIONS ABOUT GRAND MAL SEIZURES APPEARANCES BY SEX



Age at Onset by Sex - Grand mal seizures

n=17



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