

# Chesapeake Health Survey Results 2014

This health survey is the first of a two-part survey of Chesapeake Bay Retrievers in the UK, carried out by the Chesapeake Bay Retriever Club (CBRC). Owners of any Chesapeakes born from 1995 onwards, either bred in or imported into the UK, were invited to take part in the survey. The questionnaire was a simple checklist that was available online or as a paper copy. Members of the CBRC were invited to take part via the club newsletter. Non-members were invited via the CBRC website and notices in the dog press. The Kennel Club also emailed owners who had supplied email addresses when registering their Chesapeake puppies.

The aim of this first survey was to identify the prevalence of various health problems over a period of time, so that we can focus on the most relevant problems in more detail in a second survey.

Some 80 owners completed the questionnaire, of which 40 are CBRC members. A total of 141 dogs were included in the survey. This is a small number of dogs, but with only 70-120 Chesapeakes being registered each year in the UK, it could represent more than 10% of the total UK population.

Of the dogs surveyed, 63% were female and 37% male (Fig. 1). Some 34% of the females had been bred from, and 20% of the males had been used at stud.

Figure 2 shows that 48% of the dogs surveyed were reported to have had no health problems at all. A further 29% were reported to have had one problem. The remaining 23% were reported to have been affected by more than one health problem.

The single most commonly reported problem was kennel cough.

Fig. 1 Sex of surveyed dogs

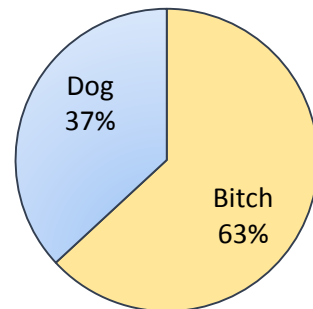
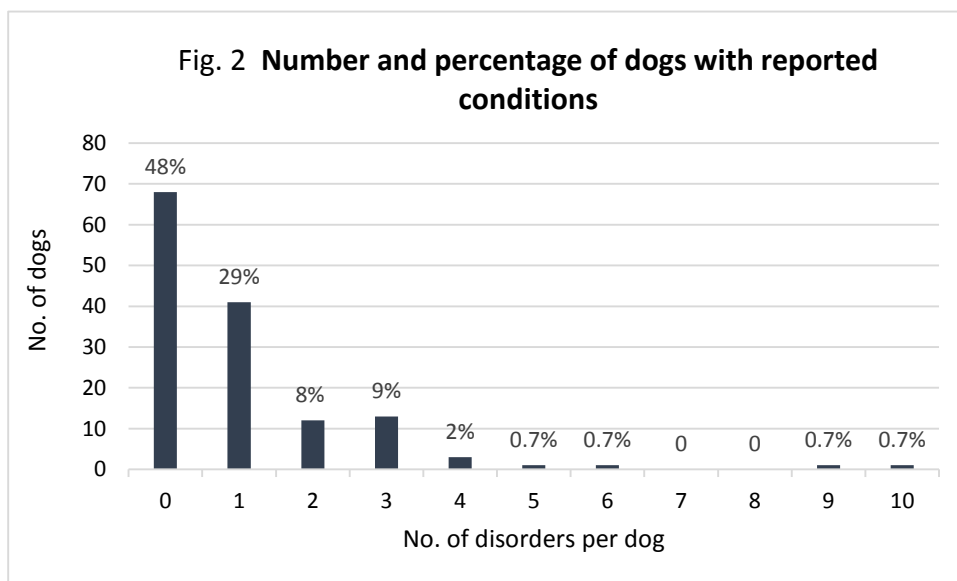


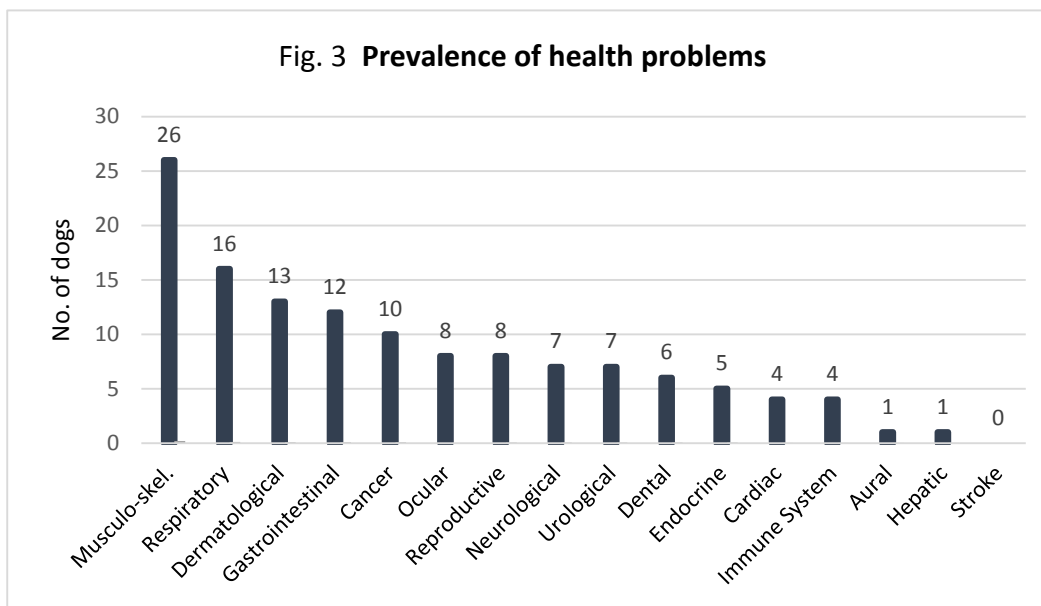
Fig. 2 Number and percentage of dogs with reported conditions



This survey did not record age at diagnosis for the reported conditions. Therefore it is not clear whether the conditions affected young dogs, or were age-related problems. Neither is it clear whether the problem was temporary or permanent. For example, the most common health problem reported was kennel cough, which is a temporary infection that is usually gone within 10–20 days. Another commonly reported problem was lameness. There can be various reasons why a dog is lame, some of which are temporary, while some are age-related, and others are related to more serious musculoskeletal problems.

Age of diagnosis, timescale of the problem and cause of death will be looked at more closely in the second survey.

Figure 3 shows the prevalence of different problems, grouped by category. Musculoskeletal conditions were found to be the most prevalent (see also Table 1).



**Table 1 Prevalence of health conditions by category**

	No. of problems	No. of dogs affected	% of dogs affected
<b>Musculoskeletal</b>	35	26	18%
<b>Respiratory</b>	16	16	11%
<b>Dermatological</b>	16	13	9%
<b>Gastrointestinal</b>	16	12	9%
<b>Cancer</b>	10	10	7%
<b>Ocular</b>	9	8	6%
<b>Reproductive</b>	8	8	6%
<b>Neurological</b>	7	7	5%
<b>Urological</b>	7	7	5%
<b>Dental</b>	6	6	4%
<b>Endocrine</b>	5	5	4%
<b>Cardiac</b>	5	4	3%
<b>Immune System</b>	4	4	3%
<b>Aural</b>	1	1	1%
<b>Hepatic</b>	1	1	1%
<b>Stroke</b>	0	0	0%

	<b>No. of dogs affected</b>	<b>% of dogs affected</b>
<b>Kennel Cough</b>	16	11%
<b>Arthritis</b>	9	6%
<b>Dermatitis</b>	8	6%
<b>Lameness</b>	7	5%
<b>Cruciate Ligament Rupture</b>	7	5%
<b>Umbilical hernia</b>	6	4%
<b>Hip Dysplasia</b>	6	4%
<b>Elbow Dysplasia</b>	6	4%

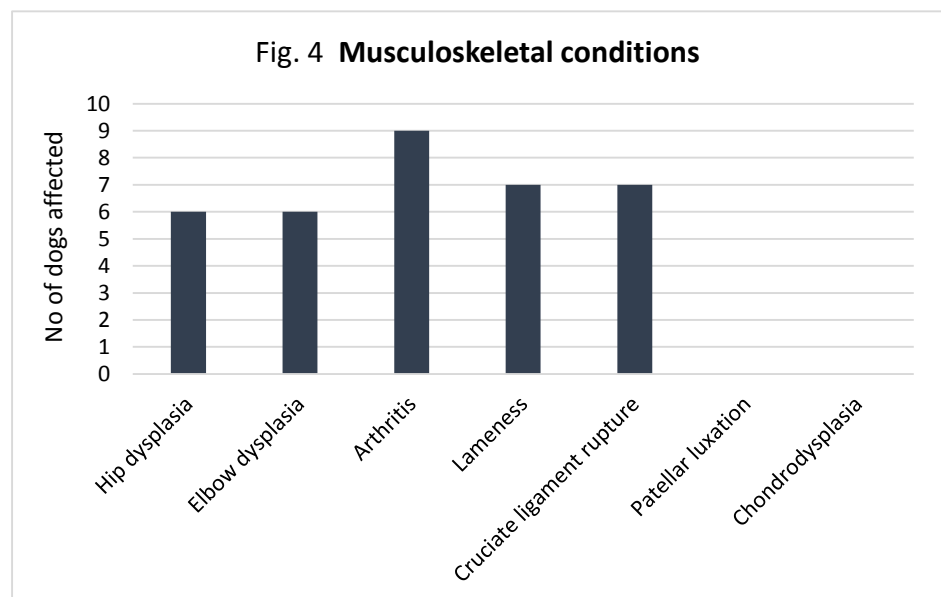
### **Musculoskeletal conditions**

Of the 141 dogs surveyed, 26 dogs (18%) were reported to have at least one musculoskeletal condition. A total of 35 musculoskeletal problems were found among the 26 affected dogs. The different conditions found are shown in Figure 4.

The 35 problems are not necessarily all separate problems in different dogs – conditions may be linked. For example, arthritis and lameness may be associated with other musculoskeletal problems. Of the 26 affected dogs, six were reported as having more than one musculoskeletal problem. Four dogs had two musculoskeletal problems, one dog had three problems, and one dog had four problems (hip and elbow dysplasia, arthritis and lameness).

Six of the seven dogs reported as being, or having been, lame were also reported to have another musculoskeletal condition.

Arthritis is the most common problem. Eight of the nine dogs reported as showing signs of arthritis were 8+ years old. One younger dog with arthritis had also been affected by a cruciate ligament rupture (and lameness). Four of the nine dogs reported with arthritis also showed signs of being lame.



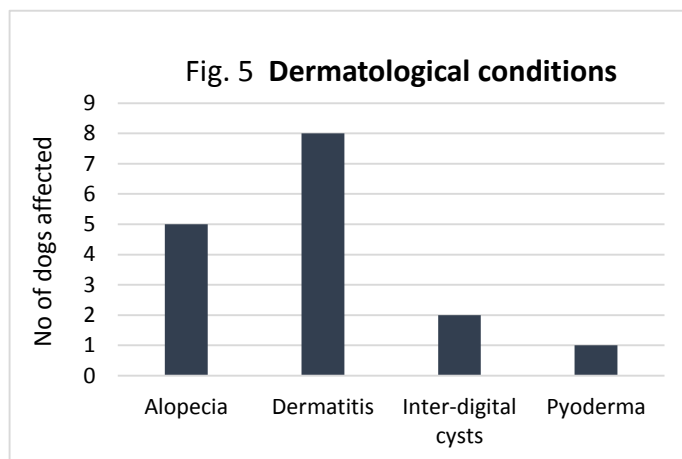
Perhaps of more concern is that half of the musculoskeletal problems occur in dogs under the age of 7 years. This could possibly be because hip and elbow scoring is done at a young age, usually around 1–2 years old, so a young dog with a high hip or elbow score is included even though outwardly it may currently show no signs of a problem. Only one of the dogs reported as having hip or elbow dysplasia was also reported as being lame. Again, this is something that will be investigated in more detail in the second survey.

### Respiratory conditions

16 dogs (11%) were reported to have had a respiratory problem. All 16 cases were kennel cough.

### Dermatological conditions

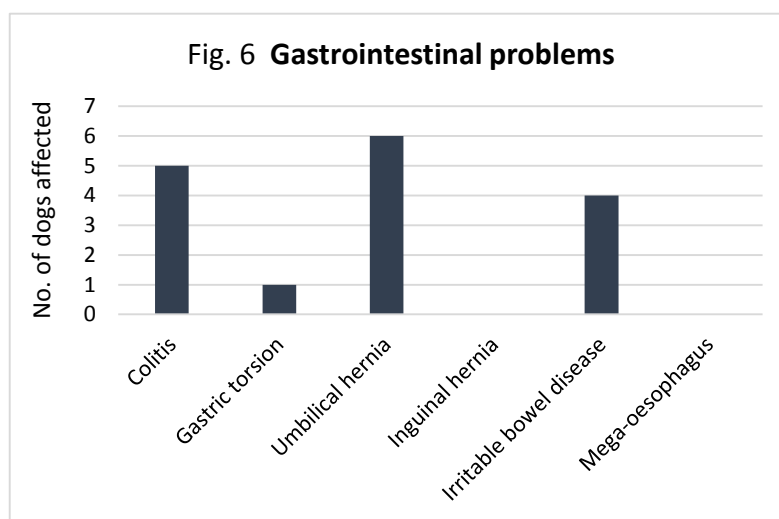
13 dogs (9%) were reported as being affected by dermatological conditions (see Fig. 5). Three of the dogs were reported to have more than one skin condition. Dermatitis is the most commonly reported skin condition, affecting eight dogs. Dermatitis does not appear to be age-related. Its prevalence is probably similar to the general dog population, and will be examined in more detail in the next survey.



### Gastrointestinal conditions

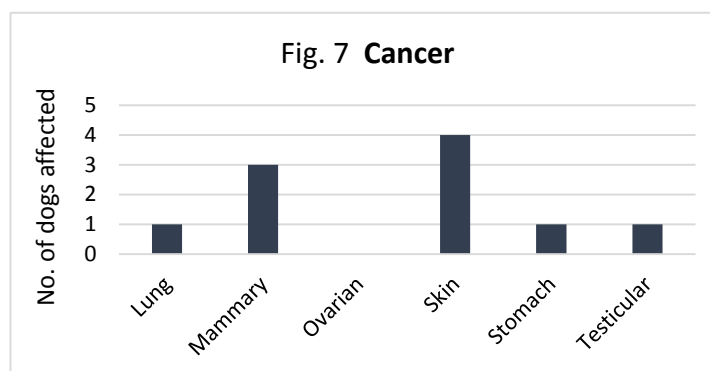
Of the 12 dogs (9%) reported as having gastrointestinal disorders, four dogs had more than one problem. Two dogs had both colitis and irritable bowel disease, which are likely to be related.

Umbilical hernias were the most common gastrointestinal problem, affecting six dogs (4%).



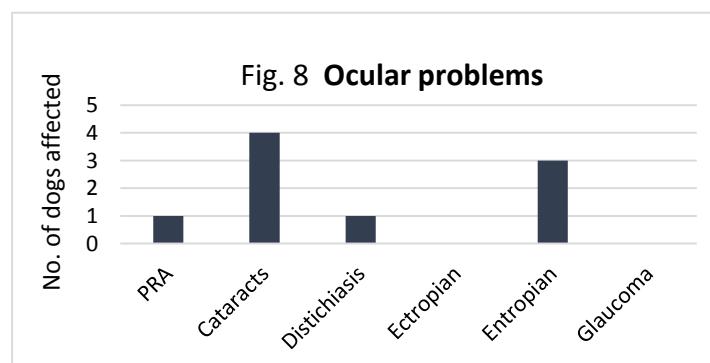
### Cancer

Ten dogs (7%) were reported to have been affected by cancer. Skin cancer was reported as the most common form of cancer, with four dogs affected. The date of birth of the dogs suggests that cancer tends to occur in older dogs, but specific information on the age of diagnosis was not collected.



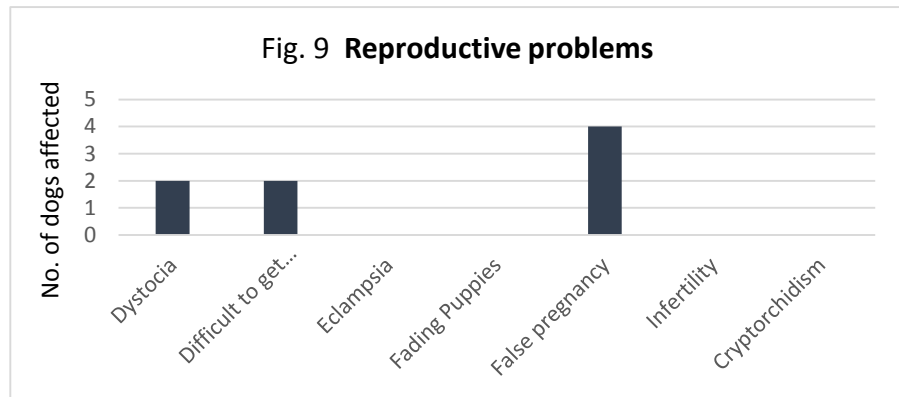
### Other categories

Other categories of problems affected fewer dogs. Cataracts was reported as the most common eye problem, with four dogs reported as being affected (see Fig. 8). Only one dog was reported to be affected by more than one eye problem (PRA and cataracts).



Of the reproductive problems encountered, false pregnancy was the most common problem, with four dogs having been affected (see Fig. 9).

Other problems affected smaller numbers of dogs. Other conditions found in this survey are summarised in Table 2.



**Table 3 Prevalence of other conditions**

	No. of problems	No. of dogs affected	% of dogs affected	Specific conditions (no. of dogs affected)
Neurological	7	7	5%	Degenerative myelopathy (5), epilepsy (2)
Urological	7	7	5%	Cystitis (5), incontinence (1), kidney failure (1)
Dental	6	6	4%	Dental disease (2), retained puppy teeth (1), overshot (2), undershot (1)
Endocrine	5	5	4%	Hypothyroidism (1), diabetes (1)
Cardiac	5	4	3%	Heart murmur (3), heart rhythm disorder (1), mitral valve disease (1)
Immune System	4	4	3%	Autoimmune disease (4)
Aural	1	1	1%	Deafness (1)
Hepatic	1	1	1%	Pancreatitis (1)
Stroke	0	0	0%	–

### Limitations of the survey

141 dogs were included in this survey. While this is a good response from a relatively rare breed of dog in the UK, it is a small population on which to base a survey.

No data were collected on age at diagnosis, the severity of the condition, or how long the condition lasted, so we cannot determine whether the health conditions were temporary or long-term, or whether they were resolved easily, serious or life-limiting.

Questionnaire surveys may be unintentionally biased by owners' recall: the survey period included disorders in dogs that occurred over 10 years ago, and we are more likely to remember serious conditions than a problem that lasted a couple of days, which cleared up without treatment, for example.

The results should therefore be treated with caution.

### Comparisons with previous Chesapeake health survey results

In 2004, the Kennel Club conducted a breed health survey.<sup>1</sup> In that survey, 120 dogs were included, compared to 141 in this survey. The two surveys asked different questions in different ways, so it is difficult to compare the results directly, but a very broad comparison can be made. In the 2004 survey, the most prevalent condition categories were musculoskeletal and dermatological, as was found in this survey. Whereas kennel cough was the most common problem identified in this 2014 survey, only 2 out of 120 dogs had been affected by kennel cough in the 2004 survey.

## Comparisons with the general dog population

The VetCompass project collects data from veterinary practices across the UK, from both pedigree and crossbreed dogs, and has published prevalence data based on records of over 148,000 dogs attending 93 vet practices.<sup>ii</sup> VetCompass has found the most common problems affecting the UK dog population in general to be ear canal conditions (10.2%), dental disease (9.3%), anal sac impaction (7.1%), overgrown nails (7.1%), arthritis (6.6%), diarrhoea (6.4%), and obesity (6.1%). Clearly, this list of disorders does not match the list of most common conditions found in Chesapeakes in the current survey. This could be due to the inherent difference between owners and vets submitting information: owner surveys may show a bias towards more serious problems, with overgrown nails or an overweight dog being seen by many owners as something they should deal with themselves, rather than being a reportable disorder for the purposes of this survey.

The VetCompass study found the most common categories of disorders in dogs to be enteropathic (intestinal) (17.8%), dermatological (15.5%) and musculoskeletal (11.8%). The musculoskeletal disorders were found in 11.2% of pedigree dogs compared to 14.1% of crossbred dogs, whereas dermatological disorders were more common in pedigree dogs (16.5%) than in crossbred dogs (11.9%). For enteropathic disorders, there was very little difference found between pedigree and crossbred dogs.

The results of this Chesapeake survey of 141 dogs cannot be directly compared to the VetCompass project, but the latter does give us some background against which to compare the Chesapeake results to the general UK dog population as a whole. The three most common categories of disorders found in the general dog population were enteropathic, dermatological and musculoskeletal. The Chesapeake survey combined enteropathic and gastric disorders together as 'gastrointestinal'. Gastrointestinal, dermatological and musculoskeletal were three of the four most common categories of disorders found in Chesapeakes in the current survey, the other common category of problem in Chesapeakes being respiratory disorders (all of which were kennel cough).

## What next?

The aim of this initial survey was simply to determine the period prevalence of disorders in Chesapeake Bay Retrievers in the UK in dogs born since 1995. The study has achieved that aim, within the limitations of such a basic survey. The next survey will collect more detailed information on the age of dogs, age at diagnosis and cause of death, as well as more detailed information on musculoskeletal and dermatological conditions in particular. It would also be useful to obtain lifestyle information to find out more about how Chesapeakes in the UK are reared, fed and exercised to see if any of this information correlates with the more common problems, particularly the musculoskeletal issues.

The Kennel Club is also about to launch a new breed health survey of all pedigree dogs, to follow up the KC survey carried out in 2004. This repeat survey will provide valuable breed-specific information within the context of other pedigree breeds. The next CBRC survey will be carried out after the KC survey to avoid owners being overloaded with questionnaires. However, the CBRC will shortly be introducing an ongoing Cause of Death survey on its website.

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## Acknowledgments

Thanks to the Kennel Club's Health Information team for their help in promoting this survey to UK Chesapeake owners, especially those owners who are not members of the Chesapeake Bay Retriever Club. Many thanks also to Ian Seath (Sunsong Dachshunds) for his invaluable help and encouragement with the data analysis. Finally, thanks to all the Chesapeake owners who completed the questionnaires.

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<sup>i</sup> KC/BSAVA (2004) *Summary results of the Purebred Dog Health Survey for Chesapeake Bay Retrievers*  
<http://www.thekennelclub.org.uk/media/16374/chesapeake%20bay%20retriever.pdf>

<sup>ii</sup> O'Neill, D.G., et al. (2014) *Prevalence of disorders recorded in dogs attending primary-care veterinary practices in England*. PLoS One, **9**(3): p. 1-16.