Afghan Hound Breed Council - Breed Health Survey 2014<br>Dr Kimberley J Mackenzie, Breed Council Breed Health Coordinator.

## Introduction and Aims

The Afghan Hound Breed Council conducted a breed health survey in order to ascertain the current health status of the Afghan Hound in the United Kingdom. The survey sought to gather information on Afghan Hounds owned in the UK between 2004 and 2014. The survey was available on-line for one year from March 2014 to March 2015. The information was provided by owners about their dogs on an anonymous basis. The survey yielded information on 682 Afghan Hounds, which is the largest ever study of the breed in the UK.

## Methods

The survey was designed and administered by Dr Kimberley Mackenzie (Breed Council Breed Health Coordinator). The survey was hosted by Survey Monkey (www.surveymonkey.com) and consisted of thirty-two questions and was available for a period of one calendar year March 2014 to March 2015. The questions in the survey were used to establish number of dogs owned in the 10 year period (2004-2014) and health status of the dogs without specific identification of either individual dogs or their owners. The answers were provided by owners themselves and due to the anonymous nature of the survey results cannot be independently verified. The disease-specific questions were based on the most common canine diseases and some additional diseases which have been noted in Afghan Hounds in the past, although the evidence for many of these have previously been anecdotal.

## Results

Number of dogs, Gender and Age
The survey received a total of 165 individual responses from owners yielding a total of 682 Afghan Hounds. The Kennel Club recorded a total of 1603 UK Afghan Hound registrations between 2005-2014, therefore our survey covers approximately $42.5 \%$ of this population (Figure 1). The participants were asked about the gender and ages of their dogs. They reported 306 (44.9\%) males and 376 (55.1\%) females (Figure 2) between the ages of 0 years and 17 years (Youngest: range $=0-17$ years, mean $=3.6$ years. Oldest: range $=0-16$ years, mean $=9.6$ years) (Figure3).

Afghan Hound Kennel Club registrations 2005-2014


Figure 1. Kennel Club Afghan Hound Registrations 2005-2014.
Kennel Club (UK) Afghan Hound registrations for the period covered by the survey. Between 2005-2014 a total of 1603 Afghan Hounds were registered in the UK.

Total number of dogs 682 ( $\mathrm{n}=165$ respondents)


Figure 2. Total number of dogs and gender of dogs in survey.
The survey received a total of 165 responses reporting on a total of 682 individual Afghan Hounds. There were slightly more females (376) than males (306) represented in the survey.


Figure 3. Age of dogs in survey.
The respondents were asked "Age of the oldest and youngest dogs?" The youngest dogs ranged from 0-17 years with a mean value of 3.6 years and the Oldest dogs ranged from 0-16 years with a mean value of 9.6 years.

## Route of acquisition and activities

The route of acquisition was covered in two questions: "How many of the dogs that you currently own or have owned in the last 10 years did you breed yourself?" and "If you did not breed all of your dogs yourself did you purchase them directly from the dogs’ breeder?" Sixty respondents ( $36.4 \%$ ) bred their dogs themselves (total of 245 dogs). The majority of dogs were acquired directly from the breeder ( 121 responses, $73.3 \%$ ), $8.5 \%$ were rehomed by their breeder ( 14 responses), $6.7 \%$ came through breed rescue ( 11 responses) and $11.5 \%$ were acquired by another method (19 responses) (Figure 4).

The survey asked for details of activities in which the dogs participate. The majority of the dogs participated in showing ( $76.7 \%, 125$ responses). Other activities included racing ( $23.9 \%$, 39 responses), lure coursing ( $16 \%, 26$ responses), Cani-X (1.8\%, 3 responses), Agility (4.3\%, 7 responses) and Obedience ( $9.2 \%, 15$ responses) (Figure 5).

## Route of acquisition ( $\mathrm{n}=165$ )



Figure 4. Route of acquisition of dogs in survey.
Owners were asked to provide information about how they acquired their dogs. The majority came directly from the breeder (73.3\%) or were bred by the owner themselves (36.4\%, 245 dogs). Breeder rehoming accounted for $8.5 \%$ and breed rescue $6.7 \%$. Other routes accounted for 11.5\%.

## Activities ( $\mathrm{n}=163$ )



Figure 5. "Which activities do you participate in with your dogs?"
The majority of dogs in the survey (163 responses) participated in showing ( $76.7 \%, 125$ responses). Only 29 respondents (17.8\%) reported doing no activities with their dogs.

Microchip Identification
The survey asked "Are all your dogs microchipped?" A total of 165 responses were received for this question with the majority, 117 respondents ( $70.9 \%$ ) giving the answer that all their dogs were microchipped. Twenty-six (15.8\%) responded with only some and 22 (13.3\%) responded with none of their dogs were microchipped (Figure 6).

Microchipping ( $\mathrm{n}=165$ )


Figure 6. Microchip Identification.
The majority of respondents reported having all of their dogs microchipped (117 responses), but 48 respondents reported only having some or none of their dogs microchipped (26 and 22 responses respectively).

## Neutering/Spaying and Breeding

The survey asked about breeding status of the dogs. The owners were asked, "Have you had any of your dogs spayed or neutered?" More than half of the dogs in the survey were intact (92 responses, 55.8\%), with 60 respondents reporting that some of their dogs were neutered/spayed and only 13 respondents (7.9\%) reporting that all of their dogs were neutered/spayed (Figure 7). The survey also asked, "Have you bred from your dogs?" The majority of respondents had not bred from their dogs ( 98 responses, 59.4\%). Of the respondents that had bred from their dogs $35.8 \%$ ( 59 respondents) had bred from one or more females and $13.9 \%$ ( 23 respondents) had bred from one or more males (Figure 8).


Figure 7. Neutering or spaying.
The survey asked, "Have you had any of your dogs spayed or neutered?" The majority (92 respondents) had not neutered or spayed any of their dogs. Of those that responded that they had neutered or spayed, 60 respondents reported that they had neutered or spayed some of their dogs and 13 reported that they had neutered or spayed all of their dogs.

## Breeding ( $\mathrm{n}=165$ )



Figure 8. Dogs used for breeding.
From a total of 165 responses, 98 respondents (59.4\%) reported that they had not used their dogs for breeding. Of those that had bred from their dogs 59 respondents (35.8\%) reported that they had bred from one or more females and 23 respondents (13.9\%) reported that they had bred from one or more males.

## Health Screening Programmes

The survey asked about the health screening programmes that are available through the British Veterinary Association and Kennel Club and the Animal Health Trust as well as the DEFRA Pet Passport scheme (Figure 9). A total of 160 responses were received. In each case the majority of respondents reported not participating in the screening programmes. The best supported was the DEFRA Pet Passport scheme where 18 respondents (11.3\%) reported all of their dogs participating and 26 respondents (16.3\%) reporting that some of their dogs participated. The BVA/KC/ISDS Eye screening had 7 respondents (4.4\%) having had all their dogs screened and 9 respondents (5.6\%) having had some of their dogs screened. The BVA/KC Hip Dysplasia screening had 7 respondents participating for both all and some of their dogs participating ( $4.4 \%$ each). The BVA/KC Elbow Dysplasia screening programme had 4 respondents (2.5\%) reporting that they had all their dogs screened and 2 respondents (1.3\%) having had some of their dogs screened. The BVA/KC Chiari Malformation/Syringomyelia screening had 3 respondents (1.9\%) reporting that all of their dogs had been screened and 1 respondent ( $0.6 \%$ ) reported having some of their dogs screened. The AHT Canine DNA testing programme had 6 respondents ( $3.8 \%$ ) reporting that they had all of their dogs screened and 4 respondents ( $2.5 \%$ ) reporting that some of their dogs had been screened.


Figure 9. Health screening programmes.
The survey asked the owners about participation in official health screening programmes. The best supported was the DEFRA Pet Passport scheme (27.5\% reported all or some participating).

Eyes, Ears, Teeth and Skin
The survey asked participants about specific conditions of the eyes, ears, teeth and skin. The total number of respondents was 158 . The majority of respondents reported no problems with their dogs' eyes, ears, teeth and skin. Of those that reported problems with their dogs' eyes, 4 respondents (2.5\%) reported lens problems, 2 (1.3\%) reported eyelid problems, and 1 ( $0.6 \%$ ) reported retinal problems, a further $10(6.3 \%)$ reported other problems with the eyes (details given: conjunctivitis, cholesterol and grass seed damage) (Figure 10). The most common ailment of the ears was infections ( 49 respondents, 31.0\%). Only 1 respondent reported deafness and 3 reported other problems (details given: grass seeds, mites) (Figure 11). For tooth related conditions Gingivitis (inflammation of the gums) was reported by 18 respondents (11.4\%) and tooth loss was reported by 11 respondents (7\%). Two respondents reported other problems (details given: plaque, tooth misalignment) (Figure 12). The most common skin complaint was cysts (19 respondents, 12\%) closely followed by allergies and rashes (18 respondents, $11.4 \%$ ). Non-medication related hair-loss was reported by 4 respondents (2.5\%). Other skin conditions were reported by 5 respondents (details given: dandruff, tumours) (Figure 13).

## Eye problems ( $\mathrm{n}=158$ )



Figure 10. Eye problems
From a total of 158 respondents 17 (10.8\%) reported problems with their dogs' eyes.

## Ear Problems ( $\mathrm{n}=158$ )



Figure 11. Ear problems.
From a total of 158 respondents 53 (33.5\%) reported ear problems. The most common problem (31.0\%) was ear infections.


Figure 12. Tooth and mouth problems.
From the 158 respondents 31 (19.6\%) reported tooth or mouth problems. The most common was inflammation of the gums (gingivitis, 11.4\%).

## Skin conditions ( $\mathrm{n}=158$ )



Figure 13. Skin conditions.
From a total of 158 respondents 46 ( $30.4 \%$ ) reported skin conditions. The most common condition was cysts (12.0\%).

Skeletal and Muscular
The survey asked about specific skeletal and muscular problems: osteoarthritis, hip dysplasia, elbow dysplasia, and other conditions. This question received 158 responses. The majority (144 responses, $91.1 \%$ ) reported no skeletal or muscular problems. The respondents that reported skeletal or muscular problems reported osteoarthritis (8 responses, 5.1\%), hip dysplasia ( 4 responses, 2.5\%), other conditions (3 respondents, $1.9 \%$ ). The conditions reported in the other category were: misaligned front leg bones, lumbar spine problems, and metaphyseal osteopathy. There were no cases of elbow dysplasia reported.

Skeletal and Muscular problems ( $n=158$ )


Figure 14. Skeletal and muscular problems.
From a total of 158 respondents 15 (9.5\%) reported skeletal or muscular problems. The most common condition was osteoarthritis (8 respondents).

The survey asked owners about any heart or blood borne conditions affecting their dogs. These questions received responses from 158 respondents. The majority of respondents reported no heart ( 138 respondents, $87.3 \%$ ) or blood conditions ( 155 respondents, $98.1 \%$ ). Respondents that reported heart conditions ( 22 respondents, $13.9 \%$ ), 4 ( $2.5 \%$ ) reported degenerative mitral valve disease, 3 (1.9\%) dilated cardiomyopathy, 6 (3.8\%) congestive heart failure, and 9 (5.7\%) other. The responses collected in the other category were 4 heart murmurs, 1 erratic heartbeat, 1 heart worm contracted abroad, 1 enlarged heart with associated arrhythmia, and 2 unspecified heart problems. Of the respondents that reported blood conditions only 2 respondents (1.3\%) reported Thrombocytopenia, with no responses for the other conditions specified. There was one response $(0.6 \%)$ in the other category reporting Hemangiosarcoma, which is a cancer of the blood vessels.

## Heart Conditions ( $\mathrm{n}=158$ )



Figure 15. Heart conditions.
From a total of 158 respondents 22 (13.9\%) reported heart conditions. The most common heart complaint was congestive heart failure ( 6 responses, $3.8 \%$ ).


Figure 16. Blood conditions.
Of the 158 respondents only 3 respondents (1.9\%) reported blood conditions.

Respiratory, Gastrointestinal, Endocrine, Nervous and Urinary systems
The survey asked about specific respiratory, gastrointestinal, endocrine, nervous and urinary system problems. The respiratory conditions question received 158 responses. The most common condition was kennel cough (17 responses, 10.8\%). Inflammatory respiratory disease only had two responses (1.3\%). Other conditions received 12 responses ( $7.6 \%$ ) where respondents reported lung cancer/tumour (2), chylothorax (2), laryngeal paralysis (2), breathing difficulties relating to a heart condition (1), cough (undiagnosed cause) (4), and one narrowing of trachea and larynx. The question on gastrointestinal conditions received 156 responses. Six respondents reported gastric torsion (3.9\%), 1 report of pancreatic insufficiency ( $0.6 \%$ ), 4 reports of inflammatory bowel disease ( $2.6 \%$ ) and 7 reported other conditions (4.5\%). The other conditions reported included: irritable bowel syndrome, splenic torsion, chronic colitis, insulinoma, and perineal hernia. The endocrine system conditions question received 156 responses. There were no cases of Type 1 Diabetes or Addisons disease and only one case each of Type 2 Diabetes and Cushings disease ( $0.6 \%$ ). The most common complaint in this category was thyroid problems which received 7 responses (4.5\%). There were no responses in the other category.

The nervous system conditions question received 156 responses. Laryngeal Paralysis was the most common condition with 17 responses (11\%). There was only one case of epilepsy reported ( $0.6 \%$ ) and no reports of other nervous system conditions. The urinary system conditions question received 156 responses. Five respondents reported kidney disorders (3.2\%), 4 reported bladder disorders (2.6\%), and 6 reported other urinary system conditions (3.9\%). The other conditions included: incontinence, urinary tract infections, acid urine and one report of a benign prostate enlargement.

## Respiratory Conditions ( $\mathrm{n}=158$ )



Figure 17. Respiratory tract conditions.
From a total of 158 responses only 31 respondents (19.6\%) reported conditions affecting the respiratory tract. The most common complaint was kennel cough ( 17 responses, 10.8\%).

## Gastric Conditions ( $\mathrm{n}=156$ )



Figure 18. Gastrointestinal conditions
From a total of 156 responses 18 respondents (11.5\%) reported gastrointestinal conditions. The most common complaint was gastric torsion (bloat) with 6 respondents (3.8\%) reporting cases.


Figure 19. Endocrine system conditions.
Nine respondents (5.8\%) reported endocrine system conditions. The most common were thyroid problems (7 reports, 4.5\%).


Figure 20. Nervous system conditions.
From a total of 156 responses 18 respondents (11.5\%) reported nervous system conditions. The most common was Laryngeal Paralysis (17 responses, 11\%).


Figure 21. Urinary system conditions.
From a total of 156 responses 15 respondents (9.6\%) reported conditions affecting the urinary system.

## Reproductive system

The survey asked about specific conditions affecting the reproductive structures and processes in their dogs. A total of 156 respondents completed this question. The most common condition reported by respondents was false pregnancy ( 55 responses, $35.3 \%$ ). Pyometra was reported by 10 respondents ( $6.4 \%$ ), Caesarean section was reported by 13 respondents ( $8.3 \%$ ) and missing or infrequent seasons was reported by 4 respondents (2.6\%). Missing or nondecending testicles were reported by 5 respondents (3.2\%). Six respondents (3.9\%) reported other reproductive conditions including: mammary gland removal, testosterone related growth, neutering complications, enlarged testicle, and neutering due to benign growths.


Figure 22. Reproductive conditions.
From a total of 156 responses 93 respondents (59.6\%) reported reproductive conditions. The most common complaint was false pregnancies ( 55 responses, $35.3 \%$ ).

## Cancer

The survey asked about specific cancers experienced by Afghan Hounds, these questions received a total of 156 responses of which 109 respondents ( $70 \%$ ) reported cancers and solid tumours. The question was split into two sections, the first asking about leukaemia and lymphoma. Seven respondents (4.5\%) reported experience of lymphoma and 3 respondents (1.9\%) reported leukaemia. There was only 1 response ( $0.6 \%$ ) in the other category describing a hemangiosarcoma of the heart. The second part of the question asked about solid tumours, these were categorised by site and system affected and therefore could include metastatic sites. The most common solid tumour were mammary tumours (29 responses, 18.6\%), followed by benign growths ( 20 responses, 12.9\%), gastrointestinal (including stomach, pancreas, liver, and intestines) with 13 responses (8.3\%), prostate/testicular tumours (12 responses, $7.7 \%$ ), lung cancer ( 6 responses, $3.9 \%$ ), bone cancer ( 5 responses, $3.2 \%$ ), and skin cancer ( 2 responses, $1.3 \%$ ). There were no reports of urinary tract or uterine/ovarian cancers. Eleven respondents reported other solid tumours including: 2 reports of anal/rectal tumours, 1 throat cancer, 1 thyroid cancer, 1 benign mammary tumour, 1 unspecified cancer, 1 bowel cancer, 1 spleen cancer, 1 mammary tumour (unspecified), and 2 reports of hemangiosarcoma.

## Cancer - Blood and Solid Tumours ( $\mathrm{n}=156$ )



Figure 23. Cancer and benign growths.
From a total of 156 responses 109 respondents (70\%) reported experience of cancer or benign growths. The most common condition was mammary tumours (29 responses, 18.6\%).

## Other conditions

The final health question in the survey asked about any other conditions not previously covered in the survey. The question received 156 responses with 54 respondents ( $34.6 \%$ ) reporting other conditions. The most common condition were anal gland problems (13 responses, 8.3\%) followed by behavioural disorders ( 10 responses, 6.4\%), adverse reactions to anaesthesia ( 9 responses, $5.8 \%$ ), adverse reaction to vaccination ( 8 responses, $5.1 \%$ ), and viral infections (4 responses, $2.6 \%$ ). There were 10 responses in the other conditions category including: stroke, renal failure, liver failure, heart attack, unspecified bacterial infection, severe travel sickness, mastitis, aggression, adverse reaction to tick and flea treatment, infection of vaccination site and rhinitis.

Other Conditions ( $\mathrm{n}=156$ )


Other Conditions

Figure 24. Other conditions.
From 156 responses 54 respondents (34.6\%) reported other conditions not previously covered in the survey. The most common condition was problems with anal glands ( 13 responses, 8.3\%).

## Discussion and conclusions

The survey asked owners of Afghan Hounds in the United Kingdom and Northern Ireland to give information on dogs they have owned between 2004 and 2014 (inclusive). The survey received an excellent response yielding data on 682 individual Afghan Hounds from 165 respondents. This appears to be the largest single study of the breed to date. Responses were received for dogs aged between less than one year-old to 17 years old. Most of the dogs covered in the survey were acquired directly from breeders or owner bred with a small number coming through re-homing routes (breeder or breed rescue). Showing was the main activity that the dogs participated in, although racing and lure coursing were also popular.

With the forthcoming changes in the law in England and Wales regarding the compulsory micro-chipping of dogs we asked how many of the respondents dogs were micro-chipped. The majority of dogs were chipped but a significant number were not ( $15.8 \%$ had some chipped and $13.3 \%$ had none of their dogs chipped). This maybe due to a lack of awareness of the change in the law and therefore an increase in advertisement of the change may be advisable. There was also a very low uptake on the current Kennel Club and British Veterinary Association screening programmes, this may also be due to a lack of awareness of the available schemes.

The survey asked about the most common conditions affecting canines, these were split into separate questions tackling the affected areas or systems separately in order to reduce the complexity of the questions and to reduce the number of possible answers per question. Each question included an "other" option where respondents were invited to give a detailed response. The results from this section will be used to inform the selection of options for future surveys. The respondents to this survey were the owners of the dogs and not veterinarians, and answers were provided on an anonymous basis. Therefore the results are not verifiable against veterinary records or take into account breeding and relatedness and therefore genetic factors.

In all but the questions regarding reproductive conditions and cancer the majority of respondents reported no problems with their dogs. Of those that reported problems, infections (ear infections, kennel cough and gingivitis), false pregnancy, allergy/rash, cysts, and anal gland problems were the most common of the non-life threatening conditions reported.

Laryngeal paralysis was reported by $10.9 \%$ of respondents. The Afghan Hound is considered by vets to be a breed likely to be affected by this condition as it mainly affects larger breeds with long necks. It can also be exacerbated by thyroid problems (which were reported by 4.5\% of respondents). Under the "other" section of the respiratory conditions question respondents referred to coughs which might be related to undiagnosed laryngeal conditions. Raising awareness of the signs and symptoms of laryngeal paralysis should be considered.

The questions covering cancer and solid tumours received the greatest number of responses (70\%). Despite the majority of Afghan Hounds in the UK not having been used for breeding purposes the majority of dogs remained un-neutered. This may account for the high incidence of mammary (18.6\%) and prostate/testicular (7.7\%) tumours reported as neutering is
considered to be the best form of prevention of these tumours. The second most common tumours reported were benign growths (12.9\%).

The majority of owners responded that their dogs were healthy and there do not appear to be any major negative trends showing at present. Going forward attention should be given to raising awareness of legislation changes (e.g. compulsory microchip identification) and conditions highlighted in this survey, namely laryngeal paralysis and mammary/testicular/prostate tumours.

Dr Kimberley Mackenzie
Breed Health Coordinator.

