FURTHER INFORMATION & CLARITY RELATING TO THE HEALTH STANDARD UPDATED AUGUST 2024

The below information has been produced following the initial announcement of the Health Standard, which was made to all Breed Health Co-ordinators on June 13th 2024. The FAQs cover the main questions and themes we have received to date throughout the breed consultation period, as well as some of the areas we are looking to develop and continuing to work on. We will be releasing further updates and information in a second version of the Health Standard later in 2024, and will continue to update the below to reflect the current advancements and changes within the project.

What is the aim of the Health Standard?

Our aim is for all Kennel Club breeders, both within and outside of the breed club communities, and puppy buyers to use this resource to clearly see all the appropriate health testing for their breed and to encourage them to test for these listed tests as a minimum. For puppy buyers this resource should help them in shaping questions to breeders on health.

Whilst breeders will be strongly encouraged to undertake all the health tests listed for their breed, the Health Standard recognises the pragmatic reality that many breeders don't health test for everything, or in many cases not at all, both within The Kennel Club registered population and those outside of our influence. Currently, nearly half (42%) of litters registered with The Kennel Club are from novice first-time breeders, and the number of tests can seem overwhelming. The Health Standard aims to send a clear message about the importance of health testing and acts as a practical tool for prioritising health testing in the best possible way, based on robust scientific criteria. We want to make decision making as easy as possible, whilst being pragmatic.

Although breeders should be completing <u>all</u> relevant health tests listed for their breed, each test has been categorised based on priority. The categorisation given to the health tests takes into account the evidence about a condition and its prevalence, as well as recognising the need to maintain genetic diversity within the breed itself.

Who is the Health Standard primarily for?

The Health Standard will be our most robust and thorough review of health testing to date and will be a clear guide for breeders at all levels of experience and puppy buyers wondering how to navigate and prioritise the range of health tests out there, using the understanding we have gained over the last decade about health testing.

Are The Kennel Club open to making changes to the Health Standard?

Yes! We have received a lot of useful feedback to date and are currently working on a second version of the Health Standard. The key themes we've taken away and are working on are as follows:

- Reviewing the names of the categories ('essential', 'advisable' and 'other'), given
 that the first version has not captured the importance of testing across these, and
 feedback has highlighted that the tests look to diminish in importance left to right.
 Therefore, a new system which encourages and rewards those that go above
 and beyond is needed.
- Reviewing the need for three columns, based on feedback that the 'other' column may be ignored and diminishes the importance of being aware of new and emerging conditions.
- Improving the tone, language and approach to breeds, to capture that whilst we
 are working off an evidence-based methodology, we do value breed input and
 consultation and are open to working with breeds to incorporate breed community
 health knowledge in our outputs.
- Whether breeds that have issues with genetic diversity should have 'essential'
 tests, given concerns over how we are going to support breeding with genetic
 diversity in mind, concerns over accuracy of the COI system for some breeds,
 and that conditions prevalent within a breed have the potential to spread more
 readily if not taken into consideration during breeding.
- Review of the wording within the Health Standard, to better support breeds identified as having poorer genetic diversity and signpost them towards further tools and details on our website.
- A suitable feedback process through which BHCs, breed clubs and breeders can report new evidence or queries, which allows the KC to capture feedback and monitor over time. This would further allow consideration to be given to evidencebased breed club schemes that are currently unrecognised.
- Appointment of a Health Standard Advisory Panel, to bring new perspective and specialism to the project, and further discussion around complex cases.
- Whether we could introduce registration schemes for imported dogs, to protect
 the UK population from a rise in disease caused by particular mutations thought
 to be at higher prevalence overseas, whilst continuing to encourage the use of
 imported dogs.
- The need for disease severity to be included in a future iteration of the Health Standard, and to build on our website resources in the interim with pictures/ videos to improve awareness of the severity of conditions within a particular breed.

What about other health conditions that are a priority in the breed but which are not covered by the Health Standard?

We appreciate that breeds may have concerns around complex conditions which are not currently covered by available health schemes or tests and are therefore not mentioned within the Health Standard. These should have been established in the Breed Health and Conservation Plan (BHCP), and we are working to improve our website so that each Breed A-Z page covers these as well as the Health Standard priorities, so that puppy buyers and breeders can have a full overview of both available and pertinent health tests, and other conditions to be mindful of when breeding/ buying a puppy.

What about unrecognised DNA tests and screening that The Kennel Club does not currently record results for?

At this stage the Health Standard only considers health tests that are currently recorded by The Kennel Club. However, this is a fluid process and we do have a huge number of DNA tests (150+) that we will be reviewing in terms of their relevance to health and relevance within a specific breed, which will be added at a later stage. If there is a specific DNA test the breed would like us to consider for recognition, we would be happy for you to provide details via the "application for a new DNA test" form on the BHC portal and we will incorporate this into the preexisting list. The Health Standard will adapt and change as new data and tests become available.

What about breed club health schemes and tests?

The Health Standard has been developed using the data we have for formalised health schemes and DNA tests, and we acknowledge that this does not cover breed club developed schemes or recommendations.

We appreciate however that many clubs have worked hard to develop and maintain health schemes over the years, as part of their commitment to raising health awareness and data collection. As part of the engagement process with Breed Health Coordinators, we completely appreciate the desire for inclusion of these schemes, and so we will consider such condition-specific schemes and their placement before the final Health Standard is released and discuss this further with the relevant breeds.

We can confirm though that the Health Standard is not the best place for breeding recommendations or restrictions outside of health testing (e.g. age of sire at breeding) and this will be managed in other areas such as the Kennel Club (B) Regulations, which is another large piece of work we are currently looking at, and which will be progressed into 2025.

How can my breed change the categories of tests?

The health test categorisation within the Health Standard has been completed against strict evidence-based criteria (outlined in further detail in the webinar provided to BHCs in June), and as such unless missing data are sourced to support the rationale behind placement of a particular recognised test, these will not be amended at this time. However, as mentioned in the webinar, this is a fluid process, the analysis will be revisited annually with a thorough review every 5 years, and where new applicable tests or formal schemes become available these will be added for the pertinent breed. BHCs can submit information and queries via the feedback form (currently in development but will be made available as soon as possible) for new and emerging tests/ conditions as part of this annual review. As outlined above, we do recognise that breeders should be testing for all relevant conditions, and are focusing on getting this messaging right before the Health Standard is publicly launched.

How do BHCs provide information on tests that are believed to be misplaced within the Health Standard?

Where we have a recognised and formalised test for which we do not have enough data in our database to draw conclusions from, we have identified prevalence using peer-reviewed literature and other available databases (using overseas data for phenotypic traits and UK based data for DNA tests). This process has been applied to every test in every breed. However, if there is a relevant publication or formalised database (e.g. Scandinavian scheme data) which you believe categorises your breed differently, we would welcome this evidence for consideration (however, please bear in mind, as already mentioned, the categories are under review). If your breed is using a DNA test that we currently do not record, we would be happy for you to provide details of this via the "application for a new DNA test" form on the BHC portal and we will incorporate this into the pre-existing consideration list.

Where have you sourced data and evidence from and why?

The Kennel Club holds over two million health test results, and where we have enough data in our system to be confident in the trends and prevalence, we have categorised tests based on this. However, we acknowledge that for some breeds certain uptake in particular schemes may be lacking or have only recently been introduced, and therefore we have filled this knowledge gap by looking at other relevant data sources. For phenotypic traits, such as hip and elbow dysplasia, we have looked at prevalence studies or international databases where larger numbers of dogs may have been tested. The rationale behind using overseas data for phenotypic or complex conditions is that those diseases are determined by large numbers of genes, and are also affected by environmental factors, which makes selection against them slow and gradual. As a result, it is unlikely that overseas populations would differ drastically from the UK population for these traits.

For DNA tests, we have sourced only UK based mutation frequency data where we do not have enough data in our own database from which to draw conclusions. We have not included overseas information here as unlike phenotypic tests, it is much

easier to select against a single mutation, and therefore overseas canine populations are likely to differ from the UK based population in the frequencies of single gene disorders tested for via DNA tests.

Will the tests categorised in the Health Standard change?

The Health Standard is rooted in science and so, as new data and trends emerge, so will the categorisation of the tests, which will be subject to ongoing oversight and comprehensive regular 5 yearly review. As outlined above, we will also be undertaking a light-touch annual review of new schemes and data, and very much appreciate the input of breeds to make sure we reflect current knowledge of testable conditions across breeds.

Why do numerically small breeds, or those with low genetic diversity have no essential tests?

We had initially made this approach as breeds with this warning are affected by a diminished genetic diversity or small population, and we know that selecting too heavily against individual traits can be detrimental in a breed that has been evidenced as already struggling with its gene pool and population size. However, we have listened to the feedback, and do appreciate the concerns raised, particularly around how we police this, the need to improve and build upon our current available tools (i.e. the inbreeding coefficient calculator), and that this could inadvertently increase the prevalence of known conditions if breeders do not balance genetic diversity properly in line with health testing. As such, whilst we will continue to highlight genetic diversity as a key priority in pertinent breeds, we will re-categorise tests that could be placed in the 'essential' column for these breeds. As a note, the category header 'essential' is going to change.

Ideally breeders should use all health testing available to them as we advise in the Health Standard and then make balanced breeding decisions. Wider information for breeds with genetic diversity concerns will be coming later in the year.

How is The Kennel Club going to support breeds that have genetic diversity listed as a priority?

All Breed Health Coordinators will receive a breed-specific population analysis report and supporting video presentation towards the end of 2024. If you have any queries about the population analysis or want more information on why genetic diversity has been assigned as a priority for your breed (if applicable), we will be inviting you to meet with us in a way easiest for yourselves and your representatives. Alternatively, you're more than welcome to email your questions to health@thekennelclub.org.uk. Additionally, you will be invited to a live webinar on the scientific paper discussing genetic trends across breeds, with details to be confirmed shortly.

On our website, there is guidance available to breeders about how to preserve genetic diversity and minimise inbreeding - <u>Manage and maintain genetic diversity | The Kennel Club</u>. These methods include:

- Introducing new genetic diversity: Populations can be geographically separated, known as a sub-population. Your breed may have sub-populations abroad. Similarly, it is possible that your breed is separated further by activities or purpose, such as show, pet, or working populations. Using imported dogs or those from other sub-populations can reintroduce new genetic variants, maintaining genetic diversity.
- Changing breeding practices: Consider health test results carefully and avoid excluding dogs from breeding programmes in breeds with small gene pools.
- Using our <u>inbreeding coefficient (COI) calculator</u>: This tool helps minimise inbreeding in future litters by calculating the probability that two copies of the same gene have been inherited from an ancestor common to both the mother and the father
- Reducing the use of popular sires: Avoid overusing male dogs for breeding to maintain genetic diversity and reduce genetic diseases.
- Considering an outcrossing programme: For breeds with severe genetic diversity concerns, outcrossing with different breeds can introduce new genes and reduce the risk of further inbreeding.

The breed-specific reports are designed to help breeders review their breed's unique situation and provide a framework for discussions with Breed Health Coordinators on maintaining or improving genetic health.

What is The Kennel Club doing about mandatory health testing?

Unfortunately, it is estimated that around 70% of dogs in the UK are not registered with The Kennel Club and are therefore bred outside of our sphere of influence. If we refused registration to those who currently register with us but who do not screen their dogs at this moment in time, we would likely lose all trace of them too. These breeders would continue to breed, and we would have absolutely no influence over them in the future.

Although The Kennel Club cannot currently mandate health testing, it is strongly advised that every breeder screens both the sire and dam of prospective litters for known hereditary conditions before breeding. Our goal is to encourage as many breeders as possible, regardless of their experience, to health test. By increasing participation, our ambition is to eventually make the minimum 'entry level' health tests included in the Health Standard compulsory for breeders before registration, as a first step and a building block, without driving them away.

Health testing is crucial for several reasons:

- Improving Breed Health: Responsible breeders aim to improve the health of their breed. Health testing helps identify and eliminate genetic health conditions, contributing to the overall well-being of the breed and producing healthier puppies.
- Ethical Breeding Practices: Health testing is fundamental to ethical breeding. Breeders who prioritise it demonstrate their commitment to producing puppies with the best possible chances of leading long and healthy lives.
- Reducing Genetic Diseases: Many dog breeds are susceptible to specific genetic diseases. DNA testing allows breeders to identify carriers and affected individuals, enabling informed breeding decisions to reduce the prevalence of these diseases.
- Avoiding Unnecessary Suffering: Health testing allows breeders to make informed decisions which minimise the risks of producing puppies with debilitating or life-threatening conditions. Breeding dogs without health testing increases the risk of producing puppies suffering from these conditions.
- **Legal and Ethical Considerations:** In the UK, breeders are legally required to ensure they are not breeding from dogs in a way that could negatively impact their health or welfare, or that of their offspring. Non-compliance can lead to legal repercussions.

What enhancements are the KC undertaking to improve puppy buyer awareness?

An area we are currently focussing on is how our 'Find a Puppy' tool prioritises and signposts towards those breeders who are health testing, making it easier for prospective puppy buyers to find a well-bred puppy. We also aim to increase awareness and understanding of the importance of health testing, including which tests are recommended for each breed.

In addition to ensuring that education and signposting around health testing is improved, it's essential that puppy buyers recognise what it means to purchase a puppy responsibly and identify the signs of good welfare when choosing a breeder. To support this, we will introduce new initiatives to improve our education throughout the breeder and puppy buyer's journey. Our recently launched online puppy pack is just one free tool to guide buyers in making informed decisions. Additionally, we plan to implement a risk assessment and feedback system, which will provide us with valuable insights into welfare concerns, enabling us to better support both breeders and puppy buyers.

How does the Health Standard relate to Breed Health and Conservation Plans (BHCPs) and priorities?

The Health Standard considers the recognised health tests and schemes recorded by The Kennel Club. However, where we do not have enough data in our own

database to draw conclusions from, we have looked at other available data, much of which stems from the Breed Health and Conservation Plans (BHCP). For example, this may include data from published prevalence studies and overseas databases. Where breeds have a newly introduced test compared to the Assured Breeders scheme, for example hip testing, we have looked at the breed's current priorities within their BHCP (acknowledging that the BHCP priorities will include both testable conditions and those that are more complex). Much like the Health Standard, the BHCP process is fluid, and the priorities will adapt and change depending on where new data and evidence become available.

Why is the severity of a condition not included in the methodology behind the prioritisation?

We acknowledge that testing may be available for some health problems that severely impact the quality of a dog's/ owner's life and due to the lack of current evidence of severity across diseases this does not currently feature in the Health Standard. This is something we would like to incorporate into the Health Standard in the future, as we know that the severity of a condition hugely implicates where it should sit in terms of a breeder's prioritisation. However, the evidence base from which severity grading could be extracted is far from comprehensive, with no objective and verifiable sources available for many conditions. Filling those gaps and allocating severity to all conditions robustly will need extensive research and expert consultation. This is not something we were able to undertake internally for the initial launch of the Health Standard but is for consideration in the next phases of development.

Will the KC accept results from overseas providers?

At this time The Kennel Club will continue to only record results from our partners, such as the BVA/KC schemes, and approved laboratories (which can be found here). However, we will be undertaking further consideration for dogs living/imported from overseas countries and will report back to the BHC community once a decision has been made.

Does the KC make income from partner schemes/ DNA Testing Services?

We collaborate with the British Veterinary Association (BVA) on health screening schemes, such as the BVA/KC/ISDS Eye Scheme. However, whilst it is often thought to be the case, we do not receive <u>any</u> financial income from the BVA/KC Canine Health Schemes. Similarly, although we gladly accept and publish results from several commercial DNA test providers that are not our own, The Kennel Club does not receive any income from these approved laboratories (which can be found here).

Our DNA Testing Services are not generating profit, however if/when they do, this will contribute towards further canine genetic research. We pass on best possible pricing for our DNA Testing Services to our customers therefore we are not making any profit at this time. Likewise, all of the health test results data are solely used to guide breed improvement initiatives, including <u>Breed Health & Conservation Plans</u>, as well

as being freely accessible to academic institutions for further research. As an organisation, we reinvest our resources through The Kennel Club Charitable Trust to fund research aimed at improving dog health. <u>Learn more about what we do for dog health here.</u>

What feedback processes are going to be in place going forwards?

Analysis of the Health Standard will be revisited annually with a thorough review every 5 years. The health tests will adapt and change depending on where new data and evidence become available. We are also building a feedback form which can be completed by Breed Health Co-ordinators and breeders, and will allow us to continue monitoring and communicating with breeds as we move forwards with the project.

Overseeing the project is The Kennel Club's Health Advisory Group (HAG) (formerly known as the Dog Health Group). This group reports directly to The Kennel Club's Board and provides advice on policies, activities, and operations on dog health and welfare, providing oversight for the promotion of dog health. It supports the strategic aims, specifically to:

- Safeguard and enhance the future of pedigree dogs, addressing breedassociated health issues
- Champion the wellbeing of dogs

For complex cases that need specific expertise, we are also looking to form a Health Standard Advisory Panel who will feed into the HAG. This group will be formed of external members who have specialisms in canine genetics, veterinary medicine and epidemiology, to help with specific issues that have been identified throughout the consultation process.

When will the Health Standard go out to all breeders and be available in hard copy and on The Kennel Club website?

The Health Standard will be launched formally – after digital development and engagement with BHCs, Breed Clubs and Assured Breeders. This will not be until later this year, and further details will be given prior to launch.

What are the changes to the Assured Breeders scheme and the health requirements for members?

The Assured Breeders scheme will cease to operate at the end of 2024, with further information provided <u>here</u>.

Where can I find out more about the project and its methodology?

We have uploaded the full webinar outlining the project to the BHC portal, which can be accessed here: https://thekennelclub.sharepoint.com/sites/KCHealthTeam-BreedHealthCo-ordinators. It is worth mentioning however that the Health Standard is under review during this development phase, and there will be major changes with

respect to the naming of the categories, the need for three categories and the placement of tests for breeds with genetic diversity concerns. Therefore, whilst the methodology is still the same and can be seen in the webinar, there is a lot of change ahead which will be coming to the BHC community for further feedback.