FURTHER INFORMATION & CLARITY RELATING TO THE HEALTH STANDARD JUNE 2024

What is the aim of the Health Standard?

Our aim is for all Kennel Club breeders, both within and outside of a peer community such as a breed club, and puppy buyers to use this resource to clearly see all of the testing appropriate for their breed and to encourage them to health test as a minimum for the health conditions listed. 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 at all, both within the KC registered population and those outside of our influence. The number of tests can be overwhelming for novice breeders – and we know that 42 percent of litters registered with us are from first-time breeders - so the Health Standard will 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 remove the hard work from doing the right thing, and make decision making as easy as possible, whilst being pragmatic about where people are at currently when it comes to health testing.

Whilst breeders will be strongly encouraged to undertake all the health tests listed for their breed, each test has been categorised into what breeders are advised to consider 'essential', 'advisable', or 'other'. The categorisation given to the health tests takes into account the evidence about a condition and its prevalence within a breed based on our data – as well as the genetic diversity within the breed itself - to determine if it should be considered advisable or essential. Tests are categorised as 'other', where data is still required, but with the clear advice that parents should still be health tested before breeding.

What are the changes to the Assured Breeder Scheme and the health requirements for members?

The Assured Breeders scheme **recommendations and requirements will remain unchanged** for those on the scheme for the time being, until the Health Standard ultimately becomes the formal set of guidance for all breeders registering with The Kennel Club.

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 deep understanding we have gained over the last decade about breed health.

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

At this stage we are working off the health test results that are currently recorded by the KC, but as you'll see from the webinar, this is a fluid process and we do have a huge number of DNA tests that we will be reviewing in terms of their relevance to health and validation 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 of this via the "application for a new DNA test" form on the BHC portal and we will incorporate this into the pre-existing list. As outlined in the webinar, the Health Standard will adapt and change as new data and tests become available.

Why are breed club health schemes and tests not included within the Health Standard?

The Health Standard has been developed based off 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. Whilst this may be disappointing, this is purely due to us not having the peer-reviewed protocols to support this type of scheme and/or recommendations at this time.

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 this engagement process with BHCs, we recognise the desire for inclusion of these schemes, and so we will consider these schemes and their placement before the final Health Standard is released and discuss with relevant breeds as part of this engagement process. However, we need to confirm that breeding recommendations (i.e. age of bitch or sire restrictions), will not be included as there are currently no scientific data to support or deny these restrictions within specific breeds.

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

We appreciate that breeds may have conditions that are complex and currently not covered by available health schemes or tests and are therefore not mentioned within the Health Standard. These will 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.

How can my breed change the essential, advisable and other tests?

The health tests categorised within the Health Standard has been completed against a strict evidence-based criteria (outlined in further detail in the webinar), 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.

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, UK based for DNA tests). This process has been applied to every test in every breed. However, if there is a relevant publication or formalised database you believe categorises your breed differently (i.e. currently classed as 'other' but database suggests a higher prevalence putting the test into 'advisable' or 'essential') we would welcome this evidence for consideration. 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.

If there is no prevalence or mutation frequency data for a particular test as outlined above, we cannot unfortunately include this within the Health Standard at this time.

Where have you sourced data and evidence from and why?

The Kennel Club holds over two million health test results, where we have enough data in our system to be confident in the trends and prevalence, we have categorised based off this. However, we acknowledge that for some breeds certain uptake in particular schemes may be lacking, 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 have been tested. The rationale behind using overseas data for phenotypic or complex conditions is that it is harder to select against any one factor or trait within these disorders, and therefore overseas data is likely to reflect what we see within our own UK population.

For DNA tests, we have sourced UK based mutation frequency data where we do not have enough data from which to draw conclusions. We have not included overseas information here as unlike phenotypic tests, it is much easier for a population to select against a single mutation, and therefore overseas canine populations are likely to differ from the UK based population.

Will 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.

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

The fundamental reason that we have not placed any health test as essential for those breeds with diminished genetic diversity and a small population size is that we know that selecting too heavily against individual traits can be to the detriment of the breed, particularly where it has been evidenced as already struggling with respect to its gene pool and population size. Whilst heavy selection can be beneficial in terms of removing a particular trait from a breed, to do so without heavy consideration to the wider breed's genetic diversity can accidentally introduce more complex conditions and alleles associated with high inbreeding and unsustainable breeding practices. Sadly, we know some of these complex conditions are already afflicting recognised breeds with limited population diversity. We of course appreciate that many knowledgeable breeders are mindful of minimising inbreeding, but by making this approach we are ensuring the wider breeding community are also breeding with this at the forefront of their breeding practices and can continue to do so as part of a viable breeding programme.

Ideally breeders should use all health testing available to them as we advise in the Health Standard and then make balanced breeding decisions against the breeding advice, utilising all dogs in recommended combinations. Wider information for breeds highlighted with genetic diversity as a priority will be to come over the summer months.

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

We will be providing further information shortly, including across-breed and within-breed support in the coming summer months alongside the release of the recently re-analysed population analyses. As mentioned in the webinar, BHCs will have a chance to come and talk to us in a way easiest for yourselves and your representatives, you will also have a dedicated population analysis pre-recorded webinar shortly, with live webinars to be confirmed later this year. If you have any queries surrounding the population analysis and how genetic diversity has been assigned as a priority for your breed, we would encourage you to take the opportunity to attend one of these sessions.

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

The Health Standard primarily relates to the recognised health test 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. For example, this may include data from prevalence studies and overseas databases. Where breeds have a newly introduced test based on available evidence compared to the Assured Breeders Scheme, for example hip testing, we have looked at the breed's current priorities within their BHCP to match up this test with the breed's current priorities (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?

This is something we would like to incorporate into the Health Standard in the future, as we appreciate that the severity of a condition hugely implicates where it should sit in terms of a breeder's prioritisation. However, to allocate severity to a condition robustly will need proper research and an evidence-based approach, to which a proper research post will need to be assigned, as part of a peer-reviewed study. 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.

How is it that hips and elbows can be listed in different categories?

Each test has been independently categorised according to the flowchart outlined in the webinar, which means for example, that for some breeds hips may be categorised in one category, and elbows another (or in other combinations). Of course, breeders should be making use of all available health tests and schemes across categories; however, following useful suggestions from BHCs, the following sentence will be added to stress the importance of this for the appropriate breeds.

Where elbows are essential but hips advisable/other:

*(as hips are also an advisable/ other test for your breed, we recommend utilising the joint hip and elbow submission further information to support here)

• Where hips are essential but elbows advisable/other:

*(as elbows are also an advisable/ other test for your breed, we recommend utilising the joint hip and elbow submission further information to support here)

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 overseas and will report back to the BHC community once a decision has been made.

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, where further details will be given.

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. Alternatively, please see a link here which will allow you to download this to your device: https://we.tl/t-KA4d7JcfOA

Can I share the webinar with my breed community?

Yes, please do share the contents of our initial email last week with your community, as well as the webinar which can be accessed via the above links.