Royal Kennel Club

A New Future for Dog Breeding

As Chairman of the Royal Kennel Club, I am pleased to introduce this full version of our **Impact Review: A New Future for Dog Breeding.** This report represents one of the most comprehensive examinations we have undertaken of our health, breeding, and governance activities. It brings together extensive evidence, expert opinion, and the voices of breeders, researchers, veterinary professionals and campaigners from across the dog world.

Our intention in commissioning this review was clear: to understand, with honesty and precision, where our current work is effective, where it falls short, and where we must focus our efforts to support a healthier future for generations of dogs. The findings do not shy away from the complexities and challenges faced by breeders and by the wider canine sector. Nor do they overlook the dedication, care and commitment demonstrated by the many individuals and breed communities who work tirelessly to preserve and improve their breeds.

This document sets out a structured and forward-looking programme for the Royal Kennel Club. It provides a clear framework through which we will refine our support for breeders, strengthen our evidence base, modernise our tools, and address the most pressing issues in genetic diversity, conformation, and breed-related disease. Importantly, it recognises that the Royal Kennel Club must offer leadership that is grounded not only in scientific rigour but also in transparency, collaboration, and accountability.

I am grateful to all those who contributed their knowledge and perspectives to this review; in particular Dr Alison Skipper who managed this project and our Health and Wellbeing team, as well as other RKC staff who have helped ensure this is an organisation-wide commitment to action. Their insights have shaped a roadmap that reinforces our longstanding values while adapting to the needs and expectations of today's dog owners, breeders and buyers. The hard work begins with this report, but its real impact will be delivered through the collective efforts of breeders, owners, judges and our partners who share our commitment to the health and welfare of dogs.

I commend this report to you and thank you for your continued support of responsible dog breeding in the United Kingdom.

Ian Seath
Chairman, the Royal Kennel Club

Alison Skipper

The overall review was conducted by Dr Alison Skipper MA Vet MB Cert VR MA PhD MRCVS, Veterinary and Research Advisor at the Royal Kennel Club, who was recruited for this purpose in January 2025. She has extensive experience in practical pedigree dog health work, a background in canine first opinion veterinary practice, a PhD in the history of breed-related disease in pedigree dogs, experience as a researcher in canine data science at the Royal Veterinary College, and prior familiarity with the Royal Kennel Club.

Further information and support were provided by The Kennel Club's Health and Breeding Team, supported by volunteer members of The Kennel Club's Health and Breeding Advisory Group. A full list of these contributors is provided in Appendix 1.

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Introduction

Dogs remain popular companion animals, with an estimated UK population of around 12.5 million, of which 25-30% are typically registered with The Royal Kennel Club (RKC) (1). However, for some years the dog breeding sector has been under significant international scrutiny due to major ongoing concerns surrounding canine health and welfare. These problems can be broadly divided into:

a) husbandry issues that compromise canine welfare, such as those related to irresponsible breeding to poor welfare standards, puppy smuggling and associated illegal practices

b) breeding practices that may compromise health or increase the likelihood of breed-related disease.

Husbandry-related welfare problems obviously compromise the wellbeing of many dogs. The Royal Kennel Club's Welfare Standard specifically addresses many such issues, and its external affairs team lobby to improve welfare practices in the canine sector. However, husbandry is generally beyond the scope of this report, which is concerned with the Royal Kennel Club's engagement with breed-related health and disease.

The Kennel Club (as it was then known) first engaged with the prevention of canine hereditary disease in the mid-twentieth century, restricting the registration of Irish Setters to control progressive retinal atrophy (PRA) in 1946, and co-launching the British Veterinary Association (BVA)/KC control scheme for hip dysplasia in 1965 (2). Yet, despite an ever-increasing range of health schemes and resources developed by the Royal Kennel Club, veterinary associations, national kennel clubs overseas, breed clubs, universities and other organisations, breeding-related disease remains a major issue that attracts extensive scrutiny both within the dog breeding sector and from other stakeholders in canine health and welfare. This criticism exploded with the landmark 'Pedigree Dogs Exposed' BBC documentary in 2008, was supported by expert reports thereafter, and has continued to simmer in online and academic commentary ever since (3–11).

The current situation has recently been described in a major multi-authored review paper, 'A New Future for Dog Breeding', led by Helle Proschowsky and Peter Sandøe of the Centre for Companion Animal Welfare at the University of Copenhagen (12). This paper has attracted considerable attention. It provides an international broad-picture review of current problems with dog breeding practices, and challenges kennel clubs and breed clubs to address these issues more effectively. It divides breed-related health concerns into three categories:

1. **Inbreeding** (issues related to genetic diversity; small, isolated breed populations; and practices that further promote inbreeding, such as the popular sire effect).
2. **Breeding for extreme physical features** (described in the paper as extreme phenotypes) which can lead to various conformation-related diseases, such as respiratory issues in flat-faced dogs or entropion/ectropion (in-turned/out-turned eyelids).
3. **Inadequate selection against disease-predisposing phenotypes and genotypes** (i.e., all breed-related diseases, ranging from diseases caused by a specific gene variant, such as PRA, to breed predispositions for complex diseases such as hip dysplasia).

The Proschowsky paper describes many organised health initiatives intended to address these problems, yet comments that, despite this work, 'very little real-world change in the health, conformation, or welfare issues of problematic dog breeds appears to have been achieved'. Despite their concerns, the authors do not suggest that pedigree dog breeding should be abolished. They acknowledge that there is a demand for canine companion animals that exceeds the supply from rescue services, that the predictable attributes of recognised breeds can be beneficial to the human-canine relationship, and that the traceability and transparency of organised dog breeding systems can offer significant benefits if canine health and welfare is prioritised. Instead, they argue that 'it is now time for those currently in charge of organised dog breeding to take responsibility for this challenge and to put the health and welfare of the dogs ahead of human goals.'

The Royal Kennel Club commissioned the current report before the Proschowsky paper was published, but we have deliberately used the same title and structured this document to directly respond to its challenge. The Royal Kennel Club has already instigated many changes intended to safeguard pedigree dog health, such as reintroducing a route to add unregistered dogs to breed registers, revising the wording of breed standards to discourage extreme conformation and developing and maintaining clinical testing schemes (in partnership with veterinary specialists) to address specific breed-related diseases. Our full provision is extensive and is described throughout this report. In some areas, there is clear evidence of progress with pedigree dog health; for example, the use of DNA tests has reduced the frequency of specific single-gene diseases in many breeds, and hip and elbow dysplasia screening has led to improvements in hip and elbow health in some breeds (13,14). Nevertheless, it is undeniable that limited genetic diversity, extreme conformation and breed-related diseases are still major issues in many breeds and that some breeders remain reluctant to prioritise health over appearance or commercial gain.

Although dog breeding decisions are ultimately always made by the individual breeder, there is no doubt that the Royal Kennel Club plays a key role in advancing pedigree dog health in the UK through its recording and use of data, its governance processes, and its outreach, educational and breeder support initiatives. Moreover, while it is inevitable that any high-profile organisation will attract criticism, it is also apparent that the various measures the Royal Kennel Club has introduced to safeguard and improve pedigree dog health have not always had the desired impact. We need to understand where change is needed. This report is intended

to provide a comprehensive overview of the Royal Kennel Club's current health work, to describe and analyse its main shortfalls and gaps, and to offer a clearly structured plan for how future work can be improved to fulfil breeders' needs and support the breeding of healthier dogs whose wellbeing is prioritised.

Legislative context

Anyone who keeps or breeds dogs in the UK must comply with the Animal Welfare Act (2006). This stipulates the 'need to be protected from pain, suffering, injury and disease' (section 9), which encompasses both husbandry and breeding decisions that may impact the health of the puppies (15). Licensed breeders must also comply with devolved regulations that apply to specific UK countries, such as the Animal Welfare (Licensing of Animal Activities) (England) Regulations 2018, which are more stringent and specific (16). Schedule 6 of these Regulations specifically concerns dog breeding, stating that '[n]o dog may be kept for breeding if it can reasonably be expected, on the basis of its genotype, phenotype or state of health that breeding from it could have a detrimental effect on its health or welfare or the health or welfare of its offspring.' This proviso clearly has extensive possible implications for pedigree dog breeding, which the Royal Kennel Club needs to consider proactively.

The Legal Advisory Group on Extreme Conformation in Dogs (LAGECDogs) has already issued a pilot legal analysis of the implications of breeding from dogs that are identified as clinically affected with respiratory disease after scoring under The Kennel Club/University of Cambridge Respiratory Function Grading scheme (17). This analysis states that licenced breeders who breed from such a dog may be committing a criminal offence. While this position has not yet been tested in court, it potentially constitutes a precedent that could be extended to other health screening provision. Moreover, specific legislation intended to tackle conformation-related disease has already been introduced in several other European countries: for example, the Netherlands has prohibited breeding from dogs with extreme brachycephalic conformation (defined through physical measurements), while Norway has prohibited the breeding of purebred Cavalier King Charles Spaniels (9). Given this context, it is imperative that the Royal Kennel Club offers robust, appropriate and comprehensive health provision to safeguard canine welfare and support breeders in producing healthy pedigree dogs for the future.

Review process

The review process is summarised below. Fuller details are provided in Appendix 1.

Four sets of external stakeholder focus meetings, all conducted in 2025, have fed into this report.

- Three population analysis breeder focus groups were attended by breed health coordinators and other nominated representatives from breed communities (approximately 45 attendees in total). Representatives of all breeds were invited to the workshops. Each session discussed one of three different topics: dog and litter data, genetic diversity tools and sire characteristics and usage.
- Three breeder focus groups considered the RKC's health support for breeders. These were attended by breed health coordinators and other breeders (over 40 attendees in total). These groups were deliberately structured to include representatives from very disparate breed communities and breeders of different levels of experience. All three sessions discussed data, governance and communications with respect to genetic diversity, extreme conformation and breed related disease.
- Two external expert stakeholder focus groups were held, including clinical veterinary specialists, geneticists and academic researchers with expertise in various aspects of pedigree dog health.
- Individual meetings were held with several external pedigree dog health campaigners.
- This report's recommendations were developed by the Royal Kennel Club's Health and Breeding Team and supported by the Royal Kennel Club's Health and Breeding Advisory Group.
- Scientific and academic information has been referenced within the text; these references are listed in Appendix 3.

Review structure

- The review begins with an overview of what we do now to support canine health.
- The main analysis is organised by the Proschowsky categories of inbreeding/genetic diversity, extreme phenotypes/conformation and breed-related disease. The report describes the main concerns in these categories that were identified during the stakeholder consultation process and explains how the Royal Kennel Club will address these concerns through our future health work.
- The report concludes with a discussion that considers the Royal Kennel Club's role within the wider canine breeding sector and how the organisation can help to shape a better future for dog breeding.
- The appendices provide background information and more detail on our future actions, for readers who require a fuller account.

What do we do now?

Royal Kennel Club health reference documents

Breed Health and Conservation Plans (BHCPs)
A comprehensive summary of available information about the overall health of each RKC registered breed: one document per breed, incorporating a literature review, insurance data, survey data, health scheme results and demographic data. Some breeds also have a BHCP Action Plan, agreed between the RKC and the breed community.

Population Genetic Analysis Reports
Population metrics for each RKC registered breed: one report per breed plus overall metrics calculated across all breeds, reported in a peer-reviewed scientific paper (most recent analysis based on data extracted from (R)KC database in 2022 (18)). Metrics included genetic and demographic parameters.

Health Standard
Standardised all-breed priority ratings identified and prioritised according to evidence-based algorithms; and genetic diversity metrics to inform breeders and buyers. Recommended tests for each breed are divided into two categories: 'Good Practice' (the 'most critical' tests, which should be performed by all breeders that aim to produce healthy dogs; this name may change in the future, in response to feedback) and 'Best Practice' (further tests that are suggested in addition to the 'Good Practice' tests for breeders aiming for the highest standards). Advertisements on the RKC's 'Find a Puppy' platform are ranked according to the Health Standard testing compliance recorded for the two parents.

Royal Kennel Club (and partner) health tools and resources

Health tools and resources for use by breeders and other stakeholders who need to evaluate dogs' genetic, conformational and clinical attributes and health parameters. Most are primarily used to assess potential breeding animals.

Online breeding tools
RKC website-based breeding tools, such as coefficient of inbreeding (COI) calculators for proposed litters, which provide a pedigree-based measure of inbreeding levels; and estimated breeding values (EBVs) for some breeds, which use pedigree and health testing data to indicate a dog's genetic risk of disease for conditions with complex inheritance, such as elbow dysplasia.

Breed Watch
This system monitors extreme conformation at dog shows. All RKC recognised breeds are assigned to one of three categories based on their conformation. Dogs in Category 3 breeds that win major show awards undergo a **veterinary health check** to identify health concerns and clinical signs of disease linked to extreme conformation. Judges are required to complete health monitoring reports after judging appointments, which track points of conformational concern for each breed. The RKC can move breeds between categories in response to show ring observations.

Recognised clinical and genetic health tests
A range of breed-specific and across-breed clinical screening tests and recognised DNA tests, including those offered directly by The Royal Kennel Club and its partners. Website users can check test results to see whether individual dogs comply with Health Standard guidelines using the health tests results finder (HTRF) and can also check parents' health testing for puppies advertised on The Kennel Club's 'Find a Puppy' service.

Other health tools and resources
Some health initiatives have also been developed by external organisations – for example, various breed club health schemes (mentioned in relevant BHCPs and the Health Standard).

Research support and education

Research outreach
The Royal Kennel Club **supports research into canine health and welfare** by using its networks to connect researchers with relevant breed communities and by publicising external research projects on its website and social media.

Research collaboration
The Royal Kennel Club actively collaborates with research partners to develop new health and breeding tools. Such projects include MateSelect (University of Nottingham); Respiratory Function Grading (University of Cambridge); EBVs and an average relationship tool (University of Edinburgh); and a currently ongoing PhD to develop better estimation of mutation frequencies (Roslin Institute).

The Royal Kennel Club also freely shares anonymised data for use in appropriate research projects that advance canine health and welfare, carried out by researchers affiliated with scientific organisations.

Kennel Club Charitable Trust
The Kennel Club Charitable Trust (KCCT) has provided significant **funding for research projects** that advance canine health and welfare. Between 2012 and 2022 the KCCT was the second largest UK animal-directed charitable funder of canine-relevant health and welfare research, providing almost £4 million of funding during this period (19).

Health-related educational resources
The RKC currently provides various health-related educational resources. Major provision is listed below.

- Breed health coordinators (volunteers from breed communities who liaise with the RKC on behalf of their breeds) are provided with targeted health support services and can attend face to face educational and networking events.
- A free webinar series hosts expert speakers on a range of specific health topics. These are publicly available via The Royal Kennel Club's YouTube channel.

- The Royal Kennel Club Academy offers free online educational modules on various topics, including dog breeding and health.
- The Royal Kennel Club's website includes extensive information on many aspects of canine health and good breeding practice. Health information is also circulated on Facebook, Instagram and LinkedIn.

The RKC runs various health-related **public awareness campaigns**, publicises health testing clinics and issues health-related press releases to promote public engagement around canine health and welfare.

The table below shows how the various elements of the RKC's current health work fit together.

Table 1. Overview of The Royal Kennel Club's health work

<table>
<tr><th colspan="5">Royal Kennel Club Breed Health and Conservation Plans</th></tr>
<tr><th>Area</th><th>Breed predispositions to disease (without tests)</th><th>Clinical testing schemes</th><th>DNA testing</th><th>Population statistics and genetics</th></tr>
<tr><td rowspan="4">Specific RKC provision</td><td rowspan="2">BHCP
Literature review of evidence describing breed-related disease for that breed
Health surveys
Insurance data
Breed club health scheme data</td><td rowspan="2">RKC/partner testing schemes (e.g. BVA/KC scheme for hip dysplasia)

EBV trends (where applicable)</td><td>RKC list of approved providers</td><td rowspan="2">Breed-specific population analysis reports and demographics (e.g. pedigree-based estimates of genetic diversity, no. of litters per sire)</td></tr>
<tr><td>RKC DNA tests/ breed packages (some breeds)</td></tr>
<tr><td colspan="2">Inclusion of test results on breed registers</td><td rowspan="2">CoI for an individual or a prospective mating can be calculated online</td></tr>
<tr><td>Breed Watch (conformation issues – show emphasis)</td><td colspan="2">Health Tests Results Finder</td></tr>
<tr><td>Inclusion in RKC Health Standard</td><td>Link to Breed Watch for relevant breeds</td><td colspan="3">List of breed relevant tests, divided between 'Good Practice' and 'Best Practice'; headline population genetics metrics</td></tr>
<tr><td></td><td>Kennel Club Charitable Trust supports research</td><td colspan="3">These RKC data are also used by external researchers</td></tr>
</table>

What we do now: does the RKC deal effectively with breeding-related health problems?

This section of the report evaluates our work against the three Proschowsky problem categories (**inbreeding/loss of genetic diversity, extreme conformation and breed-related diseases**).

Overview of international concerns

As Proschowsky *et al* summarise, all closed breeding populations inevitably **lose genetic diversity** over time, due to selective breeding, genetic drift and because not all individuals produce progeny. In pedigree dogs, this is often exacerbated by a small original founding population, population bottlenecks, deliberate **inbreeding** (particularly in the past) and the popular sire effect. Many breeds consequently have high levels of genetic homozygosity, which can lead to negative health consequences such as reduced fertility, increased neonatal mortality, reduced longevity and higher levels of disease (20–25). Genetic homozygosity can also have some positive implications, if selection removes a deleterious allele from a closed population. This was a key justification for the closure of (R)KC breed registers in the mid-20th century, and many breeders remain committed to closed breed registers for this reason.

Extreme conformation severely impacts the welfare of some dogs. Proschowsky *et al* comment that breeds with exaggerated physical features tend to become more extreme over time. Contributing factors include the human preference for exaggerated traits that significantly alter body shape; breed standard wording and its interpretation by judges and breeders; and conformational 'creep' as visual norms change over time. Variation in canine body shape becomes problematic when it affects health and/or welfare. The RKC belongs to the multi-stakeholder Brachycephalic Working Group (BWG), which works to address such issues in flat-faced dogs. We helped to develop the BWG's definition of extreme conformation;

> *"Extreme conformation in dogs describes a physical appearance that is so exaggerated that affected dogs suffer from poor health and welfare, with negative impacts on their quality and/or quantity of life"* (26).

This is a simplified version of a definition developed by the International Collaborative on Extreme Conformation in Dogs (ICECDogs) (27). We use the BWG definition of extreme conformation within the Royal Kennel Club and within this report.

Considering **breed-related diseases**, Proschowsky *et al* note that dog breeders select for a variety of criteria (such as show conformation or colour) and do not always prioritise health. Where breeders do select for health, they generally rely on clinical screening tests (most commonly for hip and/or elbow dysplasia, ocular disorders and/or cardiac disorders) and on DNA tests that typically identify mutations that cause monogenic inherited diseases. They comment that there is great variation between countries and kennel clubs in the regulatory and cultural pressure to perform health testing and argue that selection against disease-predisposing phenotypes and genotypes should generally be much more rigorous.

Our current health work

Table 2 gives an overview of how our current health work addresses each of the Proschowsky problem categories.

Table 2. Current RKC health work arranged by the Proschowsky problem categories

Proschowsky category	Genetic diversity/ inbreeding	Extreme conformation	Breed-related diseases
Data	Pedigree database In-house geneticist	Test results and clinical observations for some conformation-related diseases (Respiratory Function Grading Scheme, Intervertebral Disc Disease Scheme) Breed Watch - observations by judges at shows on conformation and health issues Owner and vet reported data on Caesarean section and conformation alteration surgeries	Evidence review in Breed Health and Conservation Plans of diseases seen in each breed RKC clinical health screening schemes (with partner organisations) and recognition of various external clinical screening and DNA health tests Pedigree database includes clinical and DNA testing results for RKC-recognised tests; can be checked via Health Test Result Finder
Governance	Restrictions on first degree relative matings Unverified parentage route to registration Some interbreeding allowed between related breed varieties Leonberger Development Register	Breed standard rewording Breed Watch categorisation Category 3 vet checks at championship shows 'Permission to show' forms post-surgery	Health Standard lists Good and Best Practice tests for each breed Import restrictions for non-clear DNA test results for some breeds Restrictions on merle registrations and matings Respiratory Function Grading Scheme test restrictions for Crufts entry, three breeds
Communications/ outreach	Online coefficient of inbreeding calculators Population analysis reports Scientific papers using RKC data Support for Leogen international outcrossing project in Leonbergers	Judges' education/briefings Internal policy on extreme conformation provides guidance for RKC staff Involvement in multi-stakeholder Brachycephalic Working Group and other external initiatives to address extreme conformation, such as parliamentary campaigning to increase awareness of brachycephalic health issues (28).	BHCPs are publicly available (in theory) Support for RKC and external research into breed-related diseases Health Standard includes description of Good/Best Practice tests for each breed Find a Puppy listings include health test results for parents and ranked by Health Standard compliance Outreach events such as health testing clinics (e.g. at Crufts) Educational programme (e.g. webinars) Social media educational outreach

What did our stakeholders say to us?

Feedback from our various stakeholder focus groups is summarised here.

Genetic diversity and inbreeding

- All categories of participants broadly agreed **that historic and ongoing inbreeding between more closely related animals has significantly reduced genetic diversity in pedigree dogs and can impact health in various ways.** The public **don't understand why inbreeding is important**: they think of it more in terms of human morality than potential health impact.
- Some breeds are effectively subdivided into **separate subpopulations**; for example by show and working type, or RKC registered and non-registered populations. Experts confirmed the **value of interbreeding between subpopulations** to support genetic diversity, where possible.
- **Participants generally agreed that breeds of different population sizes** have different challenges with genetic diversity. Loss of genetic diversity is an inevitable challenge for numerically small breeds, but numerically larger breeds can be challenged by the disproportional impact of a few influential breeders, use of popular sires, inbreeding within particular lines, or genetic separation between subpopulations.

a) Data and governance

- Participants said that some breeders **don't understand genetic diversity** and related technical concepts such as coefficients of inbreeding or effective population size.
- Overall **RKC estimates of a breed's genetic diversity may be inaccurate** for certain subpopulations, but it is currently technically difficult to analyse these subpopulations separately. Unregistered subpopulations are obviously absent from RKC data.
- Many breeders across multiple breeds reported **shallow RKC pedigrees** as a major problem, particularly when assessing inbreeding for dogs with imported ancestors. If the RKC online coefficient of inbreeding (CoI) calculator draws on (import) pedigree data with a limited number of generations, it excludes more remote common ancestors, leading to inaccurately low results that can mislead users and undermine trust in the RKC.
- Many participants highlighted the significant **differences between genetic (calculated based on genotyping alone) and pedigree CoIs**; genetic CoIs can be much higher, both for technical reasons and because pedigree CoIs can be falsely low.
- Experts noted that **genomic data can offer insights that pedigree data cannot**, such as showing how much genetic separation there is between breed subpopulations or revealing actual chance variation, e.g. between siblings; some participants thought that the RKC should therefore be recording and moving to genomic data as a more modern tool, while others disagreed.
- Participants said that many breeders will **ignore inbreeding considerations** unless RKC governance requires them to avoid inbreeding. Many thought that **restrictive governance of inbreeding** should be stricter in breeds where maintaining genetic diversity is a higher priority.

b) Small breeding pools: contributing causes

Participants broadly agreed that genetic diversity could be better maintained if more individuals were bred from in each generation. They identified various factors that contribute to this problem.

- Many breeders automatically sell all their puppies with **breeding endorsements** and may refuse to lift them.
- Many breeders do not understand the **value of breeding from a wider variety of less closely related dogs** or are only able to breed from a few dogs for practical reasons.
- Animal welfare messaging often frames **breeding as inherently problematic**, deterring responsible newcomers.
- Many vets still strongly promote **routine neutering** of all dogs.
- Logistical challenges in obtaining **health testing** may stop people from breeding because they cannot comply with health testing requirements.
- Some breeders are using commercial DNA test bundles and unnecessarily avoiding dogs which carry diseases that are **not clinically relevant** in that breed.
- Small scale breeders are increasingly deterred by **uneven and draconian local authority implementation of legislation**. This both reduces genetic diversity and reduces the supply of ethically bred puppies, thus having a doubly negative impact.

Popular sires were particularly highlighted as a major concern both by breeders and external experts.

What makes a popular sire?

Participants suggested many causes, which differ between breeds. A sire may become popular because of certain attributes, such as a 'rare' colour, because he is imported, or because he has been health tested with good results. He may be popular because he has been successful in the show ring or in a working activity; this may be exacerbated for winners of Top Stud Dog awards. A sire may be popular through good marketing, because he becomes fashionable in a social circle, because few sires are available in that breed, or even because his handler is skilled at achieving a successful mating. In some breeds where reproductive issues are common, proven sires may become over-used due to fears of using unproven studs and missing a mating. Some popular sires are widely used by many different people: others are heavily used within a single large-scale kennel. High producers are not necessarily the most popular dogs,

because the owners of some desirable dogs will limit their use. In some breeds, show or working breeders account for most popular sires, while in others popular sires are linked to commercial breeders for the pet market.

Impact of popular sires
The impact of popular sires also varies. In numerically large breeds, a popular sire can have hundreds of puppies at a young age, causing obvious issues with loss of genetic diversity and possibly spreading health problems, especially if he is not adequately health tested. In numerically small breeds, a single sire or kennel can account for a large proportion of the total puppies in that breed. This not only impacts genetic diversity and possibly health, but also saturates the pet market, further reducing genetic diversity by discouraging others from breeding because they are concerned about unsold puppies. However, there is a distinction between a sire whose progeny are also bred from and one whose progeny, however numerous, are not bred from: the latter are not a direct concern for future genetic diversity, although market saturation may be an indirect problem.

Various **regulatory solutions to the popular sire issue** were suggested, many inspired by strategies used overseas. Many breed clubs already limit sire usage within their own codes of ethics. Possible interventions include: -

- **Absolute limits on sire usage,** such as: - a minimum age for first usage; x litters in a dog's lifetime; x puppies in the first five years of a dog's life and y puppies over his whole lifetime (Finnish KC Pavisa scheme); x number of litters in a rolling 12-month or 5-year period. These limits could be banded according to breed population size.
- **Proportional limits** – e.g. x% of the puppies born in the breed in a rolling 12-month or 5- year period.
- **Social or conditional limits** – e.g. publishing the names of the highest producing x% of sires in a breed or flagging them in the Health Test Results Finder (HTRF); including the number of litters already produced by a sire in HTRF; restricting repeat matings between the same sire and dam; registration endorsement as a tool to control popular sire usage.
- Additional **tools to influence sire usage**, such as the development of an average relationship tool (a numerical metric which shows how closely a given dog is related to the mainstream registered population of that breed), or sequencing the whole genome of a popular sire to identify potential disease variants which that sire might spread through a population, which might influence usage of that sire or track the impact of using that sire.
- Participants identified many **challenges with any intervention** to address the popular sire issue. Problems, solutions and unintended consequences will all differ between breeds.

Overall, stakeholders therefore strongly agreed that **breed-specific approaches** are needed to address this problem, as breeds differ greatly in their circumstances.

c) Issues related to closed breed registers

- Some participants noted that Fédération Cynologique Internationale (FCI) countries allow **registration transfers and crossbreeding** between a wider range of related breeds than the RKC – for example, between adjacent sizes of German Spitz and Pomeranians. This helps to counter loss of genetic diversity in these breeds.
- **Outcrossing initiatives (to other breeds)** were not spontaneously mentioned in any breeder focus groups. However, **most breeder participants were neutral or positive towards the principle of the RKC supporting outcrossing in breeds where it was needed**, on a breed-led basis.
- Many breeder participants were cautious about outcrossing to other breeds, however, urging that **outcrossing should follow an 'organised, defined programme with clear rules'** and only be used with good reason.
- In contrast, **expert stakeholders and campaigners were strongly supportive of outcrossing**, considering it a k**ey tool to deal with inherited disease**. They argued that the RKC should proactively work to promote outcrossing to other breeds through open discussion and active support of ongoing projects.
- Some breeds have **substantial unregistered populations**. Outreach to these populations provides an obvious way of potentially increasing genetic diversity within RKC populations and would also extend traceability and health compliance to more UK dogs.

d) Issues related to population demographic data

Focus group participants raised several administrative concerns with the current RKC population databases.

- Multiple breeders reported issues with **clerical pedigree data errors** (such as incorrect names or ancestor attribution) and with **fraudulent pedigree data**. Participants felt the RKC response to these issues was inadequate. Some suggested parental verification via DNA testing as a partial solution.
- **Litter registration data** is likely to underreport litter size because it ignores early mortality and because some breeders don't register all the puppies in a litter.
- Dogs and subpopulations that are **bred outside the RKC system** are invisible to it, but in some breeds may nevertheless be contributing significantly to overall population demographics.

Extreme conformation

- **Some breeds are still almost defined by extreme conformation**, to the point where some external experts would like to eliminate whole breeds because of the extent of their problems. This has obvious direct implications for canine welfare.
- **Extreme conformation remains a huge external reputational issue for the RKC**, despite our previous work in this area. Campaigners remain critical that

not enough is done to deter judges from rewarding extreme conformation in the show ring. Some external stakeholders (particularly veterinary professionals) view any health information from the RKC as unreliable because of this issue, compromising our ability to offer authoritative guidance in other areas. This was a consistently strong message from many external participants.

- Experts felt that **the RKC must act more strongly to avoid falling foul of potential regulation around extreme breeding**. Previous amendments of breed standards and introduction of clinical disorder tests, while welcome, may not be enough to comply with changing ethical or legal expectations.
- Experts agreed that t**he RKC should take a leading role in discussing and addressing extreme conformation** where reliable data links it to disease. They noted that the RKC has considerable direct influence on many breeders and indirectly influences breeding norms even for the larger UK canine population outside its control.
- Experts suggested various approaches to address extreme conformation more effectively in the future. **Assessment of conformational health needs to encompass multiple conditions and include both visible features and health testing results.**
- Some experts noted that **outcrossing to other breeds could be used to address extreme conformation** and improve canine welfare more rapidly. Others noted that many breeds still have significant minority genetic variation and may retain the potential for visible change without outcrossing.
- Experts acknowledged that **the RKC must strike a balance between advice and regulatory governance**. Advisory guidelines could be followed by mandatory governance if there is evidence of inadequate improvement within a certain timeframe. However, the RKC must remain mindful that registration is not compulsory: the aim is to improve the health of canine populations, not push breeders away from RKC influence altogether.
- Most breeder participants were broadly satisfied with the operation of **Breed Watch and the vet check process**, with some specific caveats.
- Breeders generally felt that **compulsory health testing for show entries** usefully targets issues directly related to extreme conformation but should not be extended more broadly.
- Current provision overlooks less extreme conformational issues that may become more problematic through **conformational 'creep'**, as highlighted in the Proschowsky paper.

Breed-related disease

a) Health testing – overall insights on data handling

- Participants generally agreed that **BHCPs** are detailed and well documented, providing importance evidence for strategy and action. However, they contain too much information to be accessible to less informed and educated breeders and buyers and are not widely known or accessed by the broader canine health sector. The information in them is skewed towards published data sources, so can overlook emerging conditions or those in numerically small breeds with little research available. There is currently no standardised way to prioritise between different health conditions when planning actions. The BHCP process is also labour-intensive for RKC staff and requires cooperation from the breed community, which not all breeds can provide.
- Participants agreed that **health tests vary greatly in their reliability and the certainty of their evidence base.**
- Some breeds have known inherited health problems (often described in BHCPs) for which **no screening test is yet available** and which therefore are not listed in the Health Standard. This may send a message that such conditions are not important when they are.
- Many participants therefore favoured the **RKC recording test results and health data for diseases that are not currently included within the Health Standard**, but which may provide information that could become more relevant in the future. To avoid overwhelming less knowledgeable users with lower priority information, participants suggested that these 'background' test results could be recorded in a less easily visible way.
- Many participants asked for a **self-reporting function** so that people can upload verified health information about their own dogs, both as breeders and as puppy buyers. This would improve transparency and visibility of problems within a breed community, identify any emerging diseases and provide data that could be analysed further. There was strong support for this owner-uploaded data to include **mortality information. (These services are already in development).**
- Many participants suggested that data collection should also be open to **crossbreeds** – gathering information on their health would be of benefit both to their breeders and to breeders of the parent breeds.

b) Database usability issues

- Many breeder participants had concerns about the **current RKC health test database interface**, noting that some other countries have more transparent databases where the user can more easily compare health results for the relatives of a certain dog. People wanted the RKC to provide a similar service, effectively reintroducing the family comparison tool previously available on the old Kennel Club website.
- Many participants complained that limited or no health test information is currently visible for overseas dogs on RKC pedigrees and that **overseas health test results** for RKC registered dogs were not accepted **(following a subsequent update, these now appear as 'results with owner')**. Some said that some UK breeders choose overseas test providers specifically to avoid public disclosure of results.

c) Clinical health testing schemes

- Participants noted that **clinical health screening schemes have some inherent limitations** due to

diagnostic uncertainty (false positives and negatives). Clinical schemes are likely to have better uptake if they are accessible and cheap, if breeders support the need to address that disease, if they trust the testing methodology and if there is a good chance of a favourable result.

- Participants noted some **administrative issues with the recording of scheme data**. People can choose not to submit poor hip or elbow radiographs for formal evaluation, which conceals issues and distorts population data. Clinical eye, respiratory and cardiac testing is only valid for a certain period because disease is often progressive, but at the time of focus group consultation one test result satisfied Health Standard testing requirements indefinitely. **(This has now been modified for respiratory and cardiac testing and is currently under review for the BVA/KC/ISDS Eye Scheme)**.
- There was some expert discussion about the **value of the BVA/KC hip and elbow dysplasia schemes**. The predictive value of hip scoring is relatively low, but nevertheless this tool has been successfully used in selection against hip and elbow dysplasia across various breed populations. Overall, the hip dysplasia scheme is likely to be more clinically relevant to some breeds than others, according to physical size and genetic risk for osteoarthritis.
- Recording under the BVA/KC/ISDS Eye Scheme can be problematic because it encompasses **multiple conditions which are complex to record**, including conditions of the adnexa (eyelids), such as entropion and ectropion, which previously were not in scope but are important welfare issues. Unless a condition is formally agreed to be inherited in a certain breed, it is not clearly published on the system, which reduces transparency and traceability.
- **Emerging inherited eye diseases** may nowadays be identified or diagnosed by ophthalmologists working in private practice rather than under the Eye Scheme and thus are not always shared more broadly. Breed health coordinators can act as an informal conduit to share this information through breed communities and with the RKC, but a more formal route would be helpful.
- Multiple participants requested the introduction of an **official patella luxation testing scheme.**

d) DNA testing

- Some breeder participants requested more clarity over **which DNA testing laboratories are recognised by the RKC.** Some differentiated between the reliability and transparency of appropriate test provision by different recognised laboratories.
- Several expert and breeder participants noted that certain **genetic risk tests** issued by commercial providers are highly misleading. The RKC performs an important role in providing independent scrutiny of such tests.
- Some participants noted that the RKC can be **slow to validate some breed-specific tests** that others consider relevant to that breed.
- Many laboratories now offer **broad DNA testing panels** that include information about many inherited diseases, including results that are irrelevant or even misleading for that breed (as with degenerative myelopathy in many breeds). Some participants wanted the RKC to record this information, but others thought this could confuse inexperienced users and reduce the impact and visibility of more important tests for that breed.
- Some participants suggested that the RKC could record broader test data as a **research tool**, while only displaying the Health Standard relevant results for each breed on HTRF to avoid user confusion.

e) Governance

- Multiple participants emphasised the importance of **regulatory pressure** to drive improvement in health testing practices, particularly in breeds where many leading breeders and show judges are not performing best health practice.
- Participants differentiated between **highly motivated core breeders** and the penumbra of more **casual or commercial breeders** in numerically larger breeds, who will perform the minimum health testing needed to sell their puppies, if they test at all.
- Some participants questioned whether health criteria (e.g. compliance with the Health Standard) **should be based on testing status or testing results.**

f) Mandatory health testing and the Health Standard

- Participants generally supported the concept of **mandatory health testing**, but with mixed views on its implementation. There was broad consensus that mandatory testing requirements should be breed-specific and should consider practicalities such as test cost and availability. Any mandatory test must also be well established and reliable, because mandating a test that is later invalidated can cause immense problems through unnecessarily reducing genetic diversity, also reducing breeders' trust in the RKC's recommendations and in health testing procedures overall. Most participants thought that mandatory testing should be restricted to conditions that are so prevalent and/or severe that they **seriously impact welfare**, with evidence-based individual decisions made collaboratively by the RKC and each breed community if possible or, if necessary, imposed after a period of encouragement.
- Many participants warned that mandatory testing risks driving people away: it's often better to offer **incentives for compliance**, such as accolades or benefits for testing.
- A few participants noted that some breed club health schemes already mandate certain health tests and that the RKC already has limited mandatory health testing requirements – for example, RFGS testing for some brachycephalic breeds entered at Crufts. One veterinary participant commented that mandatory testing for serious diseases might already be a legal requirement under the 2018 Animal Welfare Act.

- Participants noted that mandatory testing could apply useful pressure to breed communities that are currently **wilfully ignoring serious health problems**, and would signal to puppy buyers that a breed has significant issues that they should be asking breeders about, with the caveat that this approach should be reserved for particularly serious situations.
- Many participants said that the **mandatory testing requirements** of the RKC's former **Assured Breeders Scheme (ABS)** had provided clear signposting about **best breeding practice** that was also used by other breeders and which was easily understood by puppy buyers.
- Some participants felt that the **Health Standard** is weaker than the ABS because it is advisory rather than mandatory, or that the Health Standard is less accessible to the public than the ABS because it does not directly show which breeders are compliant (although compliance is flagged on the RKC's Find a Puppy service). Many thought there should be a clearer way of showing which breeders are Health Standard compliant and of incentivising breeders to meet the Health Standard, thus retaining many benefits of the ABS system without some of the less successful aspects.
- Participants generally thought that, after some initial teething problems, the **Health Standard** is now working well, although some were confused about the inclusion of genetic diversity alongside health testing requirements, arguing that many users will not understand or be able to evaluate this **(following this feedback, genetic diversity will be removed in the next Health Standard update).**
- Participants were enthusiastic about potentially using the Health Standard as the basis of a health guidance service for breeders, which could eventually be built into an algorithm-based rating system to categorise breeders in a way that puppy buyers can easily assimilate. They also liked the concept of building customised breed-specific health profiles that arise from a centralised decision-making process that works across all breeds.

g) Health testing and registration

- Our participants did not generally support universal mandatory health testing of RKC registered dogs, because they mostly thought that there should be minimal barriers to registration, not only because it generates income (which is obviously necessary for any organisation) but also because **wider registration maximises traceable data** on the canine population, which is vital to improve canine welfare. This is discussed in more detail in the concluding section of this report.
- Participants widely supported a **health-linked tiered registration system** that differentiates between litters with and without health tested parents. Requirements could be customised to each breed using the Health Standard, and could consider genetic diversity, if feasible. The system should be carefully developed to avoid unintended consequences and to negotiate various technical issues.
- This system could include **incentives for health testing** (such as accolades or cost discounts). It would need **clear, accessible customer signalling** (such as colour coding) to differentiate between levels for puppy buyers.
- Participants also discussed **health-related registration restrictions,** such as banning the mating together of dogs with certain test results or totally banning the breeding of such dogs. Most thought that such restrictions were a valuable measure that should probably be deployed in specific but limited circumstances, where there is a clear need, but with due consideration of unintended consequences (such as deterring people from testing or, if this was mandatory, from registration).

Outreach and communication: cross-cutting issues

Focus group participants raised many different issues with our outreach and communication to different audiences.

- Our **website** hosts a lot of useful information, but it is currently hard to navigate and doesn't integrate effectively with Google searches, reducing its value to new users. Information could be displayed much more clearly.
- It is particularly challenging for us to engage with people who currently have little or no awareness of the RKC. We could do far more to promote breeding for health beyond our core communities, but we would need to find new ways to **reach the wider public**, such as messaging through entertainment.
- We could do much more to engage with **new puppy buyers** by explaining the role of the RKC and how to identify a responsible breeder. We underuse educational outreach at events such as Crufts.
- Health information and support need to be pitched appropriately for **breeders of different experience levels**, with targeted outreach to breed communities to promote appropriate best practice. There is generally poor awareness of the work of the RKC Health & Breeding Team – this should be promoted more.
- Communication between **health stakeholder groups** – particularly between veterinary specialists and breeders – can be patchy. The RKC should be proactive in supporting these connections and promoting research initiatives.
- There is a huge and problematic gulf between the RKC and the **veterinary sector**, where busy professionals often have a poor impression of the dog world and have no awareness of our health work, despite its value in addressing many of the problems they deal with. We need better outreach and communication with the veterinary community so we can collaborate more effectively to improve canine health.

What are we going to do?

We have carefully considered the feedback from our consultation process. Our response has two parts. The next section of this report explains our new approach to our health work and outlines how we will be building on what we currently offer to develop a more comprehensive and effective range of health and breeding tools for the future. We have also included a more detailed list of smaller changes in our health work, many of which are directly responding to issues raised in the stakeholder focus groups. This list of smaller changes is provided in Appendix 2.

Our new approach: Breeding for Health

This report has shown that the RKC currently provides effective ways to support some aspects of breeding for health but does not yet comprehensively address all aspects of inbreeding and genetic diversity, extreme conformation and breed-related disease. To lead effectively in the improvement of canine health, we need to appropriately support all breeds in ways that can be easily used and understood by breeders, buyers and other interested groups (such as vets), whatever their needs or level of prior expertise.

We need to customise our support, intervention and governance by breed, because breeds differ enormously in the problems they face and the solutions that may be appropriate, as previous RKC research has shown (18). We should work with breed communities where possible, both to use their knowledge and to tailor our support to their needs. However, with 225 breeds currently recognised by the RKC, we cannot provide ongoing individual customised support for every breed. Even if this were possible, treating each breed separately also prevents breed communities from learning from and supporting each other where they are dealing with similar issues.

For these reasons, we are launching a new **Breeding for Health Framework**. This provides a structured framework covering all aspects of health to consider when making breeding decisions.

The Royal Kennel Club Breeding for Health Framework

The **Royal Kennel Club Breeding for Health Framework** has two key elements:

- **The Breeding for Health Framework**: a grid of nine categories which together cover the various aspects of health and welfare that should influence breeding choices for any breed or type of dog.
- **Breed groupings**: Where different breeds share a similar issue with genetic diversity, conformation or breed-related disease and wellbeing, they can be grouped together for support and intervention related to that issue. The breeds that are grouped together will vary according to the issue, so that each breed will have an overall grouping profile that provides tailored support for its needs. The grouping system will address the need, as identified by stakeholders, to develop breed-specific approaches, whilst managing the limitations of our resources. It will also allow breed communities that face a similar issue to support each other by sharing their experiences and expertise.

The Breeding for Health Framework is based on the three domains of health concern (inbreeding/genetic diversity, extreme conformation and breed-related disease) used in this report, but adapted to show that they also apply where there is currently no identified problem (for example, we need to think about overall conformation, not just extreme conformation). This gives three broad domains: genetic diversity, conformation and breed-related disease/wellbeing. We have identified three topic categories within each of these three domains, thus forming a framework with nine sections.

Table 3. The Royal Kennel Club Breeding for Health Framework

Genetic diversity	Conformation	Breed-related disease and wellbeing
Population size	Visible conformation	Testable conditions
Harmful breeding practices/ popular sires	Distinctive breed features of potential concern	Untestable conditions
Limited pedigree data	Shifting conformation over time	Temperament/mental wellbeing

Genetic diversity

Population size

Some breeds have more restricted genetic diversity because few dogs are available for breeding, either within the UK or globally, because of historic events such as population bottlenecks, or because of popular sire use, resulting in many dogs being highly related. These breeds may suffer from the consequences of reduced genetic diversity, such as inbreeding depression (for example, poor fertility), or from the emergence of new hereditary diseases, or may lack the genetic resources for selection against existing breed-relevant diseases. Where problems are identified, solutions will include education on the management of genetic diversity, including identification of potential new sources of diversity such as working dog populations, related breed varieties, or even outcrossing to other breeds. Breeds developing breeding strategies will receive advice and support from the RKC.

Harmful breeding practices/popular sires

There are many breeds where the use of popular sires or other harmful breeding practices, such as deliberate inbreeding or division of subpopulations, are contributing to more rapid loss of breed genetic diversity. Solutions are likely to include identification and tracking of such patterns, educational provision to encourage the prioritisation of genetic diversity in breeding decisions, and, if necessary, regulatory change to reduce the use of popular sires and discourage inbreeding.

Limited pedigree data

In some breeds where many dogs are imported, RKC data is likely to misrepresent ancestral inbreeding because imported dogs are only provided with a three-generation pedigree. Similar problems may also occur in other specific circumstances. Solutions are likely to involve consultation with breed communities and international collaborations to address this problem and increase provision in this area.

Conformation

Visible conformation

Every dog should have a body shape that allows it to lead a normal life and to display normal canine behaviour. The Government's All-Parliamentary Group on Animal Welfare (APGAW) has recently (November 2025) launched an Innate Health Assessment (IHA) process, intended for self-assessment use by licenced breeders and the puppy buying public. The IHA assesses the body shape of all dogs in a standardised way. Following a similar principle, The Royal Kennel Club is developing a Nose-to-Tail Visual Assessment, undertaken by veterinary surgeons, that will provide a standardised assessment process for visible conformation that applies to all breeds. It will be designed to address evidence-based priority concerns, to act as a tool to monitor conformational change and to utilise the expertise and objectivity afforded by a veterinary examination. The Nose-to-Tail Visual Assessment will be introduced alongside the Breed Watch system, which may subsequently evolve over time.

Distinctive breed features of potential concern

Healthy visible conformation is applicable and relevant to all breeds, but there are other distinctive breed features that may be considered potentially problematic for health or welfare but which are only relevant to certain breeds (for example, colours that are linked to congenital deafness, or extreme coat phenotypes). Such features will require customised assessment to identify how best to mitigate their impact on canine welfare.

Shifting conformation over time (conformational 'creep')

Where breed conformation is gradually becoming more exaggerated but has not yet become extreme, there is scope to intervene and reverse this trend, if breeders and owners are aware of the problem. This can be addressed by the development of an early-warning system that triggers appropriate intervention.

Breed-related disease and wellbeing

Testable conditions

The Health Standard already provides a standardised framework for the inclusion and prioritisation of breed-relevant health tests according to their evidence-based prevalence, which is updated on an ongoing basis. We are developing more flexible and tailored ways to identify suitable evidence and working on how to consider disease severity in the prioritisation of different tests. Certain testing schemes are currently under internal review and partnership development. We are also planning to develop a decision framework for the targeted implementation of mandatory health testing.

Untestable conditions

In some breeds, there are serious disease burdens for which no screening tests are currently available (for example, certain sorts of cancer; autoimmune problems; some specific diseases without tests, such as craniomandibular osteopathy in certain breeds). Including untestable conditions within the Breeding for Health Framework reminds everyone of their importance while researchers strive to understand their causes better and develop suitable breeding tools to address these problems.

Temperament/mental wellbeing

The breeding world often tends to focus on physical health rather than mental health. However, behavioural problems are a major and often serious issue for many dogs and their owners, with a substantial impact on welfare. A mismatch between canine behavioural needs and owner expectations is a common reason for rehoming, and sadly behavioural issues are a major cause of euthanasia in younger dogs of some breeds. The inclusion of temperament and mental wellbeing within the Breeding for Health Framework is a preliminary step towards giving this topic the attention it deserves to improve canine lives.

Priority work for 2026

While all future Royal Kennel Club health work will be developed in alignment with the Breeding for Health Framework, our capacity is limited, and this work will therefore be rolled out in phases. The first phase of work will

address the topics across the top row of the Breeding for Health Framework matrix:

- Genetic diversity: Supporting genetic diversity in small populations
- Conformation: The Royal Kennel Club Nose-to-Tail Visual Assessment
- Breed-related disease and wellbeing: Testable conditions
- Other topics will be addressed later as resources allow.

Simplified and effective health messaging

Overall, contributors agreed that RKC health information is currently too complex for many users to navigate, and that our information can be hard to find or is not shared in ways that engage new audiences. We plan to address this problem in several ways. This work is intended to be flexible, useful, engaging and responsive to what our audiences need.

We want to develop a simplified way to display the key health issues for any breed within a standardised and streamlined interface that can be displayed on a breed's A-Z index. This will show website users which breeds have higher health burdens in a way that is easily accessible to users who are not yet knowledgeable about canine health. We are committed to this concept, but it cannot be developed until after the main deployment of the Breeding for Health Framework.

Our audiences include novice and experienced breeders, dog owners, the general public and other canine health advisors such as veterinary professionals. Participants gave a strong message that we need to provide more easily accessible educational information that is pitched at different levels appropriate for these very different audiences. We are therefore looking at new ways to share information about good practice in canine health and breeding by developing a range of in-house educational materials that we can share more widely on social media and through our community networks.

We are also working to increase our visibility in the veterinary sector and to improve our relationships with veterinary professionals. We already visit some veterinary schools and find this outreach very positive for all parties. We have also invited vet students to Crufts for many years. We have recently (September 2025) launched an informal network for veterinary professionals who are also active in the dog world, to support further collaboration between these communities.

Readers are welcome to approach the Health and Breeding Team with suggestions for materials or approaches that would support any of these outreach pathways. Relevant contact details are in Appendix 1.

Concluding thoughts: a new future for dog breeding

Although a detailed discussion of husbandry, welfare beyond health, or trade is beyond the scope of this report, any discussion of pedigree dog breeding sits within the wider context of the whole dog supply sector. It is now widely accepted in animal welfare circles that we need more ethically bred dogs (29). Many dog rescues do a wonderful job, but rescue alone cannot supply the market for companion dogs. Many dogs in UK rescue sadly have serious medical or behavioural issues that complicate successful adoption, while the overseas rescue trade, despite some undoubted good practice, is poorly regulated and can be a cover for problematic activities or a route for the introduction of new infectious diseases (29–33). We need a domestic supply of well-bred puppies with good temperaments that are likely to make suitable family pets. It should not be shameful to buy a healthy puppy from a traceable breeder who follows best health and welfare practice. However, many puppy buyers don't know what to look for, and UK breeders vary enormously in their experience, reasons for breeding, husbandry standards and engagement with health. Poor breeding practices remain common, despite extensive efforts by many organisations to improve welfare through legislation and education.

Moreover, despite the new consensus that there is a need for ethical domestic dog breeding, the RKC is not necessarily perceived as a leader in this space, despite being the only widely known UK national organisation that actively provides both broad and breed-specific administrative, health-based and educational support for dog breeders. There are two major reasons for this. We currently only engage with registered pedigree dogs, which are a declining minority of the total canine population, so that we cannot provide a service for many breeders and buyers. Also, heavy public messaging has for many years emphasised the health problems of pedigree dogs, often with little acknowledgement that many breeds have good overall health and little mention of our work to counter these issues (5,34–36). Unfortunately, despite our health work, uptake of health testing remains generally low, conformation-related disease remains a serious issue in some breeds, and many people still experience significant health problems with their dogs. Yet, as one expert participant noted, 'there is a bigger world, there are huge harms going on … [a] downfall of the [R]KC in the UK would be really bad for dog welfare.' Even though we could still be doing more to support good dog breeding and improve canine health, what we already do does make a difference.

Many stakeholders across our various focus groups therefore argued that we should be much clearer on why people should buy an RKC registered dog. The RKC currently only registers perhaps 25% of the UK puppy supply. The majority of UK-bred puppies are neither RKC registered nor bred in licenced breeding kennels, and so have no formal traceability other than that inconsistently provided by the

microchip system (37). The illegal puppy trade is a major welfare problem, made possible by lack of traceability (38). The RKC's value therefore starts from the basic yet important point that traceability should be a fundamental minimum requirement for any puppy. RKC registration does not inherently provide an endorsement of health or welfare, but it does provide traceability (especially if supported by microchip data). We need to provide effective leadership that improves canine health as widely as possible, and the foundation for this is the traceability and transparency that registration provides. Outreach, data, and a route to better practice by offering incentives for health testing and breeding healthy dogs can then all follow.

If the most basic reason for choosing an RKC registered puppy is traceability, the added value that builds on this traceability is the provision of breed-related health information. There are two ways in which the RKC is uniquely positioned within the UK to provide this information. Firstly, puppies bred from RKC registered parents come from a system with breed-specific health screening programmes (discussed in detail in this report), so that a breeder or puppy buyer can have transparent access to multigenerational relevant health information about individual dogs. Secondly, the RKC can provide effective leadership in canine health by clearly prioritising the top health issues in each breed and providing tailored support to deal with them appropriately. This can help buyers and breeders to navigate complex health information and can help to shape what each breed 'should be' by gradually shifting ideas about what is acceptable. Our new Breeding for Health approach provides a framework to support this work effectively. By providing traceability, transparent health information and effective customised intervention to address the top health priorities for each breed, the RKC is working to deliver a new future for dog breeding that prioritises canine welfare while retaining breed individuality. We aim to improve canine health through natural adoption, but if more governance is needed to shift behaviour to comply with shifting ethical standards and legislative requirements, we can implement this flexibly and responsively through the Breeding for Health approach, introducing measures such as targeted mandatory health testing if they are needed.

The current RKC registration model was developed in a world where closed breed registers were aspirational. It was supported by the science of the time, which promoted 'pure breeding' to predictably produce dogs selected for desirable characteristics and without undesirable characteristics (including inherited disease). However, scientific knowledge has changed enormously, and we now understand the importance of also considering genetic diversity. The overall dog breeding sector is arguably now moving into a 'post purebred, post pedigree world', although there are of course still many breeders who are striving to breed healthy dogs within closed breed registers (as well as some for whom health is not yet a priority, unfortunately).

Many readers of this report will have enormous knowledge of and tremendous loyalty to their own breed: supporting those breeders is a cornerstone of the RKC's heritage. But surely everyone interested in dogs today would agree that all dogs should have a good quality of life. Many external stakeholders strongly urged us that, if the RKC is to remain broadly relevant, we should support anyone who is breeding dogs ethically. We can continue to serve our traditional core communities but also reach out to communities that are not currently associated with us to better understand what we can offer these groups and the barriers that separate us from them. Supporting and facilitating a broader 'ethical pathway to purchase' would tap into an important and emerging market, where genetic diversity and breadth of inclusion become positive. Through outreach and collaboration, we can offer customised support services for dogs of all breeds or none, ranging from traditional closed breed registers for breeds that have adequate genetic diversity and no associated issues with breed-related disease to partly or fully open register systems where those are more appropriate or preferred.

Throughout our consultation process, stakeholders from all perspectives supported our move towards greater transparency and engagement. Participants offered us frank and sometimes very critical feedback. This report has aimed to capture and share this feedback openly and accurately. We cannot implement everything that was suggested, and the changes that we propose in this report will fall short for some people and be too extreme to suit others. However, we can promise to continue working in an open, transparent and collaborative way to drive further effective change that will shape a better future for dog breeding.

Appendix 1: details of review process

Scope of review

It is impossible for one document to fully explore all aspects of the Royal Kennel Club's health provision. The following areas were considered in scope for the current review.

- BHCP literature review and action plan documents, interface and name
- Disease prioritisation – possible future methodologies
- Health Standard: content, relationship to BHCP, interface and linked tools
- Extreme conformation: management tools and interface
- Population genetic analysis reports (broad view consideration only)
- Genetic diversity management, governance and relation to BHCP (broad overview only)
- Genetic tools for breeders
- Governance/B-regs – health testing and adoption/ compliance
- Breed health coordinator role and function.

The following were considered out of scope for the review:

- Royal Kennel Club registration systems and registration products and services, except in relation to the recording of health tests and governance of genetic diversity
- Details of existing health schemes and customer service
- Details of existing DNA test provision and customer service
- Details of future innovations: this would require subsequent planning and development, driven by the recommendations of the current impact review process.

Contributing focus group members

We would like to thank all our focus group participants for their immensely valuable insights. The depth of knowledge and breadth of perspectives that participants shared with us have contributed significantly to this report.

Breeder focus groups included breed heath coordinators and other breeders with a range of experience and expertise, including some people who are also veterinary or medical professionals or scientists. Over forty breeds were represented from across the spectrum of RKC recognised breeds, including all seven show groups, several of the top 10 breeds numerically, mid-range breeds numerically, vulnerable British native breeds, imported register breeds, breeds from all three Breed Watch categories (hence those with and without extreme conformation) and breeds with a wide range of levels and types of breed-related disease.

External expert stakeholders

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Veterinary Standards Lead, Blue Cross

Dr Tom Lewis PhD
Breeding and Genetics Lead, Guide Dogs

Paul McPherson BVMS CertVOphthal MRCVS
Chief Panellist, BVA/KC Eye Scheme

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Pedigree dog health campaigners

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Contact the Health and Breeding Team:
Health@royalkennelclub.com **– general inbox for the Health & Breeding Team**

Appendix 2: You said – We did

This appendix gives a detailed list of what our stakeholders asked of us, showing what we've already been able to implement, what we aim to develop in the future, and what cannot currently be developed or delivered (and why). We expect to update on this in late 2026.

Genetic diversity

What did our stakeholders ask for?	Already in development	For future development
Missing or incorrect data and shallow pedigrees	We have begun a major cleanup operation to deal with **data errors**. Some of these errors may not be resolvable, in which case erroneous records may have to be removed.	Breed-specific population genetics reports will be amended to clarify explanations of where **incomplete pedigree data** biases estimates of genetic diversity and to include links to other sources of pedigree data provided by breed health coordinators. The final documents will be publicly available (on request) from Jan 2026.
		We are open to discussion on breed-led suggestions to **extend shallow pedigree data** for imported dogs.
		On the website, we will provide a clearer explanation of how **shallow pedigrees affect the accuracy of CoI calculations**, and we will explore ways to grade the accuracy of CoI estimates according to the depth of supporting pedigrees.
Artificial insemination		We will investigate ways to improve our data collection and reporting on artificial insemination and overseas matings.
Better recording of information against litters	Litters with an **unusually large number of puppies** for the breed must be confirmed by photographic evidence that shows all the puppies together.	We are investigating ways to record **early mortality** to obtain more accurate data on litter sizes.
Recording genetic CoI data		We will explore whether this can be included within a potential 'other data' section of a dog's health record.
Popular sire syndrome		We will look in depth at possible ways to address the popular sire issue.

Making our database and health provision more relevant to all subpopulations		We are investigating the development of a **breeder/owner data entry function** so that people can register a dog as (for example) from the show/working/activity sector/s. This will allow us to test the **inclusion of subpopulations in future data analyses**, where feasible, which will provide breeders with more specific and relevant information.
		We will reach out to breeders of working and other subpopulations that tend to be bred **outside the RKC system** to better understand how we can serve these communities.
Average relatedness tool		We will also explore the feasibility of piloting our **average relatedness tool,** developed through research partnership at the Roslin Institute, to investigate its value in helping breeders to choose a less related sire. Such a pilot could involve a single breed and be supported by appropriate partnership involvement.

Offering DNA parental verification as part of RKC registration
This is not immediately feasible as a universal feature, because it would drastically increase the cost of registration, but we will continue to monitor demand for this provision. It could potentially be introduced as a premium feature to distinguish exceptionally rigorous breeders.

Conformation

What did our stakeholders ask for?	Already in development	For future development
Breed Watch and breed showing	The **veterinary check process** for Category 3 Breed Watch breeds has been recently reviewed and will be refined further in response to feedback.	We will be introducing better **feedback loops** in all directions within the Breed Watch system.
	We will continue to track emerging issues via Breed Watch and to monitor the progress achieved.	We will revisit the issue of **judges who continue to reward extreme conformation** in the show ring and consider how this can be addressed more effectively.
	Breed standards continue to undergo ongoing scrutiny and may be further updated in the future to reduce any justification to reward extreme conformation in the show ring.	We intend to develop a clear way for exhibitors and other people who have **health-related questions** about specific **show judging decisions** to report their concerns to us.

Clinical health screening tests to identify conformation-related disease	We are continuing to review and, if necessary, extend or alter, **clinical health screening tests that identify conformation-related disease**, such as the RFGS and the CM/SM scheme (see below).	
Nose to tail	We have begun the development of a **new nose-to-tail veterinary visual assessment** process.	Our new **educational provision** will include material that considers problems related to conformation and will be designed to reach pet owners as well as breeders.

Health

What did our stakeholders ask for?	Already in development	For future development
Health schemes	We are reviewing certain **health schemes**. We are extending the RFGS to more breeds and investigating the possibility of an official patella assessment scheme.	We have **suspended the inclusion of the BVA/KC CM/SM Scheme within the Health Standard** while we conduct an internal review of the barriers to its effective adoption and of possible alternative interventions. This review has begun and will continue into 2026.
Better capturing health data	A preliminary **morbidity/mortality reporting system** is already in development.	We are developing a s**elf-reporting function** for owners to upload health information to a dog's RKC record.
Better signposting for puppy buyers		The **Health Test Results Finder (HTRF)** and Find a Puppy services will continue to be improved.
		We will be investigating the launch of a **Find a Breeder** tool, which would identify breeders who are compliant with the Health Standard in a way that is simple for puppy buyers to use.
		We are also exploring adding **breeder warning processes** within a new **puppy feedback process** for puppy purchasers. This is also currently in development.

Health Standard		The **Health Standard** will continue to be updated every 6 months, in response to changing information about new challenges with breed-related disease and to account for already achieved improvement. These changes will also reflect changes in evidence requirements and severity grading as we develop these frameworks under our Breeding for Health Framework.
Better supporting breeders	We have recently launched a **canine midwifery initiative** to put novice breeders in touch with experienced breeders within the community, who can share firsthand experiences and valuable insights.	

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