

BRITISH VETERINARY ASSOCIATION /KENNEL CLUB/ INTERNATIONAL SHEEP DOG SOCIETY (BVA/KC/ISDS) EYE SCHEME

What is the Eye Scheme?

The BVA/KC/ISDS Eye Scheme is based on eye examination and is a means of identifying inherited and non-inherited ocular conditions in dogs. The majority of dogs presented for examination under the Eye Scheme are pedigree dogs with known inherited diseases of the eye, but it is important to emphasise that all dogs, including crossbreeds, can be examined under the Scheme. This approach reassures breeders that the dogs they are to use for breeding have healthy eyes and the inclusive approach means that new and emerging problems are more likely to be recognised. The aim of the Eye Scheme is to reduce or eliminate the incidence of inherited eye disease.

The BVA website <https://www.bva.co.uk/Canine-Health-Schemes/Eye-scheme> sets out the information needed to use the service. Information includes a leaflet on hereditary eye disease in dogs, various leaflets, lists of those breeds and conditions with known (Schedule A) or suspected (Schedule B) inherited eye disease as well as a litter screening checklist. The fees charged and the list of BVA appointed eye panellists are also included.

In general, the best age for the first eye test and issue of a certificate of eye examination is after the dog has reached one year of age and before it is used for breeding. It is recommended that, as a minimum, all dogs are examined before they are used for breeding and again when they are over 8 years of age (at a reduced fee). Examinations under the Scheme between these two recommendations will depend on the age of onset of inherited conditions in the breed being examined, emerging problems that may be inherited and how frequently the dog is being used for breeding; thus popular sires would be examined annually, but for others the test frequency could be risk based. In some breeds with eye conditions that are present at the time of birth, or soon afterwards, it is sensible to carry out an additional assessment known as litter screening when the puppies are between five and twelve weeks of age.

What conditions and breeds are specified on the Certificate of Eye Examination?

The conditions specified are those of the eye itself and not, for example, clinical conditions associated with brachycephaly, or those involving the eyelids, or those relating to tear production, distribution and drainage. Thus adnexal conditions (those of the eyelids, lacrimal system, orbit, or orbital region) are simply noted in the middle section of the certificate. In part this approach is needed because evidence of inheritance for these disorders, which include common problems such as entropion and ectropion, is incomplete and their complex nature is acknowledged. However, comments made in the middle section of the certificate are a crucial data gathering exercise, especially so if they highlight conditions that have welfare implications, such as ocular discomfort or reduced vision. The bottom section of the certificate records the inherited eye disease status for Schedule A conditions as either 'Clinically Unaffected' or 'Clinically Affected'.

What conditions and breeds are specified on the Litter Screening Eye Examination Form?

The conditions specified are those known inherited eye conditions that are present from birth (congenital), or soon after birth (neonatal). They are recorded in the middle section as 'Clinically Unaffected' or 'Clinically Affected', whereas any comments relating to other findings of relevance are recorded in the bottom section of the Litter Screening Form.

What are Schedules A and B?

Schedule A lists the **known** inherited eye conditions in the breeds where there is enough scientific information to show that the condition is inherited in the breed, often including the actual mode of inheritance and available DNA tests. For the breeds on Schedule A the Certificate of Eye Examination is issued with results for each inherited condition as 'Clinically Affected' or 'Clinically Unaffected' and these results are recorded and published by the Kennel Club.

Schedule B lists those breeds in which the conditions are, at this stage, only **suspected** of being inherited.

For breeds examined under the Eye Scheme but not listed under Schedule A, where the dog is registered with the Kennel Club, a note will be added to the dog's record on the Kennel Club's database confirming that an examination has taken place and the date of the examination.

Who decides when a breed or condition is added to Schedules A or B?

An Eye Panel Working Party (EPWP) consisting of experienced veterinary ophthalmologists is appointed by BVA. The EPWP meets at least twice a year. Analysis of data from the Certificates of Eye Examination and Litter Screening Forms helps to identify emerging conditions which may then be added to Schedule B and the EPWP makes the final decisions on what breeds and conditions will be listed under Schedule A. Amendments to Schedule A and B conditions come into effect on January 1st or July 1st each year, so it is important to check whether new breeds or conditions have been added. The British Veterinary Association, Kennel Club and International Sheep Dog Society notify breeds clubs, breeders and veterinary surgeons respectively of the changes as appropriate.

How does a breed or condition qualify for inclusion in the Scheme?

There are a number of ways in which information on eye conditions is provided to allow the EPWP to evaluate the quantity and quality of findings and this information may come from a variety of sources, including publications, veterinary surgeons, geneticists and breed clubs, as well as academic and research institutions. For inclusion of conditions in Schedule B evidence is gathered in a number of different ways. For example, dogs in sufficiently representative numbers may be presented by breeders for examination, even though the breed is not currently listed in the Schedules; sometimes potential inherited ocular conditions are first identified in a general or referral practice; and sometimes a breed club, or other interested parties, will have gathered information on pedigrees or problems in related dogs in the UK and in other countries. By whatever route the information becomes available, if it is sufficient to suggest an emerging inherited eye disease, the condition is placed on Schedule B. Adnexal conditions that may be inherited and which have been noted in the middle section of the certificate may also be listed on Schedule B, especially if they have welfare implications that can lead to pain, or blindness, require surgical correction, or long term medical therapy.

For a condition to be classed as Schedule A (certifiable) scientific evidence of the inherited nature of the condition in a breed is required and so the criteria for inclusion have to be much stricter. The amount (quantity) and reliability (quality) of information is important and often there will need to be good quality (usually peer reviewed) published data available either from the UK or abroad. A clinical prevalence of at least 1% over a minimum three-year period is a requirement for inclusion in Schedule A. Breeds and/or conditions are usually moved from Schedule B to Schedule A as a consequence of the information collated and analysed by BVA and the EPWP.

How do I get my dog's eyes tested?

There is a list of BVA appointed eye panellists who can issue certificates under the Scheme and you can make an appointment with them directly or through your own veterinary surgeon. Often breed clubs will arrange for a BVA panellist to attend a specially arranged eye testing session or to examine eyes as part of an organised dog show. This arrangement allows many dogs to be examined on one occasion and may save time and money. Note, however, that there is no sliding scale of fees for gonioscopy which is separate from routine eye examination.

As from April 2016 it became a legal requirement for all dogs to be microchipped and registered to an approved database by the time they are 8 weeks of age. From July 2017 it is intended that puppies presented for litter screening will also need to be microchipped, as is already the case with ISDS registered puppies. You must have the relevant KC or ISDS owner registration document with you in order to present your dog for an eye test and certification under the Scheme. Wherever possible, you should also provide any previous eye certificates issued for your dog. For litter screening the puppies' date of birth and Kennel Club or ISDS registered name and number of the sire and dam is required.

What should I do if I want to breed from my dog?

It will be necessary to obtain the latest information on the breed-related and inherited conditions relevant for your breed. Make sure that the dog and bitch to be mated have current eye certificates showing them to be unaffected for the inherited conditions relevant to the breed. An eye certificate is current if it has been issued within the calendar year. The Kennel Club publish all results of Schedule A breeds and will be able to tell you over the telephone of any dog's current result, providing you know that dog's KC Registered Name and/or Number. Results for ISDS registered dogs are published by the ISDS and any inquiries relating to ISDS registered dogs should be directed to the ISDS.

Can I do any more to help the breed?

Yes. In addition to your dogs being regularly eye tested under the Eye Scheme you could ask your breed club or society what they are doing for the breed. The KC and ISDS work closely with breeders, breed health coordinators and breed clubs. Often a geneticist or eye panellist with a particular interest in that breed or condition may be assisting a breed club or society. Clearly you should not breed from a dog that is affected with a known hereditary eye disease, or has suspected inherited eye disease, without discussing the situation with an expert.

Where can I get more information?

The Scheme's procedure notes and other free leaflets can be obtained from: British Veterinary Association, 7 Mansfield Street, London W1G 9NQ
Telephone: 020 7908 6380
Or visit www.bva.co.uk/chs and link to Canine Health Schemes

Library information and current eye test results for KC registered dogs can be obtained from:
The Kennel Club, Clarges Street, London W1J 8AB
Telephone: 0129 631 8540
Or visit www.thekennelclub.org.uk/doghealth

International Sheep Dog Society, Clifton House, 4a Goldington Road, Bedford, MK40 3NF
Telephone 01234 352672
Or visit www.isds.org.uk