COLLIE CLUB OF AMERICA HEALTH STATEMENT

October 1, 2022

The Collie Club of America (CCA) has a strong history of recognizing the need for health testing and supporting breeder responsibility to the health and health testing of Collies through multiple mechanisms.

- 1. The CCA Code of Ethics (https://collieclubofamerica.org/membership.html#ethics2) includes multiple references to the health and well-being of collies. Specific to health and health testing, that code includes the following language:
 - No Collie should be sold with defects of health or temperament that would interfere with its normal function as a suitable pet or companion. All known defects shall be disclosed to the new owner in writing.
 - All dogs shall be transferred, sold or placed in good condition, free of communicable diseases with health guaranteed for a reasonable length of time. This should include a written health record, including an inoculation schedule and an eye examination done either by a licensed veterinarian trained in veterinary ophthalmology or a certified ophthalmologist. It is also suggested that the dogs have some type of permanent identification, such as a microchip or tattoo.
- 2. Initial development and continued support of the Collie Health Foundation (CHF). In 1986 the CCA established the Collie Club of America Foundation devoted to the health and welfare of the collie. That Foundation grew and, in 2002 was incorporated as the Collie Health Foundation. The CHF was a pioneer and served as a model prototype for many parent club health foundations, including the AKC's own Canine Health Foundation. The Collie Health Foundation's mission is to fund research medical projects that will benefit the future health of the Collie, and to educate the public and Collie breeders about health issues. The CHF is now a separate IRS 501(c)3 non-profit corporation that receives its funds through CHF membership dues and donations, fund-raising activities, and other contributions such as \$1 from every CCA member's dues. The CHF provides excellent educational and supportive information on its website, https://www.colliehealth.org, and encourages health testing by its members through education, discounts, refunds, and subsides to testing through Wisdom Health (https://breeder.wisdompanel.com) CHF provides significant support for research grants important to the Collie at veterinary programs throughout the country as can be reviewed at https://www.colliehealth.org/grants-overview/
- 3. Supporting seminars and distinguished lecturer presentations on Collie health at regional and national meetings of the CCA, often in conjunction with its Breed Education and Health Committees, and the CHF. Videos of several of these health-related presentations may be found on both the CCA and CHF websites.

4. Breeder of the Year criteria includes health testing as an integral part of the yearly award. It is currently 10% of the award but MUST include the health screening identified in the Code of Ethics to be considered. Bonus points are awarded for more thorough testing. Complete criteria for health testing can be found here: https://collieclubofamerica.org/22/breeder-of-the-year-point-scale.pdf

While the CCA specifies an eye examination done either by a licensed veterinarian trained in veterinary ophthalmology or a certified ophthalmologist, it is highly recommended and generally accepted that a good breeding program includes testing for MDR1, PRA, and DMS in addition to Collie Eye Anomaly (CEA). An excellent overview of these conditions can be found on the CHF website under Testing 101 - https://www.colliehealth.org/collie-health-101/. The CHF has extensively supported research on all of these health concerns.

- MDR1 (Multi-drug sensitivity) test This is a genetic test with clear understandable results that can identify Normal/Normal, Normal/Mutant, and Mutant/Mutant dogs. Many collies have at least 1 of the genetic mutations, or both. The main body of research regarding MDR1 genetics and sensitivities has been done at Washington State University (https://www.colliehealth.org/multidrug-sensitivity/). This genetic defect allows certain drugs to cross the blood/brain barrier and sometimes severe neurological symptoms can result, depending on the drug and the amount given. Many of the implicated medications are used to prevent or treat a wide range of conditions and/or diseases in collies, so it is extremely important that the results are known for a specific dog prior to using any of these drugs. A list of the implicated drugs and dosing recommendations may be found on the WSU website and it is updated as needed https://prime.vetmed.wsu.edu/2022/03/01/problem-medications-for-dogs/.
 - Normal/Normal dogs do not carry the mutation and do not pass the mutation on to offspring. Dogs typically are not expected to have an adverse reaction to normal dosages of implicated drugs
 - Normal/Mutant dogs carry the mutation and may pass it on to offspring. Dogs may experience toxicity to normal or higher than normal dosages on implicated drugs
 - Mutant/Mutant dogs fully carry the mutation and will pass it to offspring. Dogs would be expected to experience toxicity reactions to even normal dosage ranges of implicated drugs
- **PRA- rcd2** (progressive retinal atrophy) test This is a genetic test with clear understandable results. PRA-rcd2 creates an abnormal development (dysplasia) of the rods and cones (the light sensitive cells in the eye) that leads to an early onset of night blindness that is typically apparent by the time pups are 6 weeks of age. In most cases, the PRA-rcd2 affected dog is completely blind by the time it is 1 year old. In the past the only way to find carriers was to
 - do test breedings to PRA blind bitches ,but luckily, this is no longer necessary as a genetic test has been developed. The test can identify dogs that are normal, carrier, or affected (the affected is known to cause blindness). This is a good test to include because of the severity of the disease. Additionally, puppies should have an eye examination by a certified veterinarian

ophthalmologist prior to going to a new home. The main body of research has been through Michigan State University and Cornell University.

- The **DMS** (Dermatomyositis) test This is an inflammatory auto-immune disease affecting skin or muscle and both in extreme cases. This test allows breeders to select an appropriate sire or dam to produce more genetically lower risk progeny. Information, including a video presentation, can be found at https://www.colliehealth.org/dermatomyositis/
- CEA (Collie Eye Anomaly) testing CEA was first noted by researchers in the 1960s and is present at birth. The mutation affects the inner structures of the eye, such as the choroid, the retina and the optic disk. Most CEA dogs do not have visual acuity issues. It is assessed through an eye exam by a Board Certified Veterinary Ophthalmologist. It exists in most Collies and in most Collie families. The genetic mutation was pinpointed in 2007 and is now able to be DNA tested. The DNA test is required for CEA to be genetically cleared. It can present with different degrees of severity so the physical exam described above is still needed. More information including a video presentation on the different degrees of severity can be found at https://www.colliehealth.org/cea-mutation/. The CHF is currently funding research and sponsoring a sample request to identify the genetic markers for the more severe forms of CEA. CHF is fully refunding costs for any collie breeder who enters for the length of the study at University of Pennsylvania.

The Collie Health Foundation also supports the Martha E Hoffman CHIC DNA Banking Project https://www.colliehealth.org/dna-banking/). CHIC (Canine Health Information Center) is sponsored by AKC/Canine Health Foundation and Orthopedic Foundation for Animals. Breeders who contribute to this project help to preserve the future of the Collie breed. With the gene pool of all purebred dogs shrinking the DNA bank will provide approved researchers access to samples needed for genetic research projects. Donors will have access to their dog's DNA when new tests become available. Having samples available when new research studies become available will cut down the time for samples to be made available to researchers and lead to a more efficient process.

Collies are blessed with overall good health and are typically hardy with a life span between 10-14 years (average 12). Due to responsible breeding by CCA members and attention to appropriate testing that Collies continue to be the wonderful dogs for family pets, performance and conformation events, and a full and healthy life.

Written with the approval of the Breed Education Committee, Collie Health Organization, and composed by Isabel Ososki, CCA Board Member for this project

Approval by the Board of the Collie Club of America, Inc. on October 12, 2022

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