Dogue De Bordeaux Health Information Sheet

In keeping with the spirit of a strong Code of Ethics, Dogue de Bordeaux breeders are encouraged to inform puppy buyers of developmental conditions that may or may not be hereditary or genetic, that are known to exist in the DDB, as well as methods to test and/or monitor some of these conditions.

It is hoped this Health Information Sheet will guide buyers to ask pertinent questions, encourage their review of testing certifications and enable them to make educated decisions before purchasing a DDB.

Preferably buyers should be asked to read this before committing to a purchase and encouraged to ask questions. It is important that the buyer understand the potential for these conditions or problems to develop in **any** Dogue de Bordeaux, regardless of the line, pedigree, breeder, or testing of ancestors and thus the need for testing and reporting the results of those tests to the breeder and participating in ongoing research efforts. Please keep in mind that all purebred and mixed breed dogs can have health concerns including show dogs, working dogs, family pets, and service companion animals.

HEART DISEASE IN THE BREED

The heart is probably the single most important organ of any dog, any breed. If it does not function, the dog dies. Heart Disease, unfortunately, is rampant in the Dogue de Bordeaux with Sub Aortic Stenosis and Dilated Cardiomyopathy the leading cause of death in the breed. Congenital heart diseases in dogs are malformations of the heart or great vessels. The lesions characterizing congenital heart defects are present at birth and may develop more fully during perinatal and growth periods. Many congenital heart defects are thought to be genetically transmitted from parents to offspring; however, the exact modes of inheritance have not been precisely determined for all cardiovascular malformations. Conditions genetic in nature and are often present at birth. Puppies can be born with certain congenital heart disease. Some are treatable, some are not. Sometimes, juvenile mild heart murmurs are only present because the heart was not completely developed at birth and they are often outgrown, but not always. The only way to be sure a Dogue de Bordeaux does not have heart disease is by an echocardiogram.

- **SAS (Subvalvular arotic senosis)** - Stenosis means that there is a narrowing of valves in the heart. This disease has been demonstrated to be genetically passed down. Diagnosed by finding a heart murmur and then a check for other symptoms. This disease if very difficult to diagnose and is done with a test called doppler echocardiographic identification which will show a problem with blood flow in the left ventricular.
- **DCM (Dilated Cardio myopathy)** – In this disease the ventricular section of the heart becomes enlarged or dilated. The dog may retain fluid in the chest cavity. DCM is believed to be both a genetic heart disease or can be an acquired heart disease.
- **Aortic Stenosis** – When there is a blocked connection between the left side of the heart and your dog's body.
- **Hole in the Heart (Atrial Septal Defect)** – When there is a hole connecting the heart's two upper chambers. This canine congenital heart disease can be repaired with surgery in the same way a human heart can be treated. The procedure is performed by inserting a catheter through the dogs arm or neck.
- **Pulmonic Stenosis** – When there is a blocked connection between the right side of the heart and the lungs.
- **Mitral Dysplasia** – A leaky mitral valve causes this condition and is being seen with increasing frequency in Bull Terriers and the Cavalier King Charles Spaniel. When a mitral valve leaks, the left ventricle of the heart contracts causing some blood to leak backward into the left atrium (called Mitral Regurgitation).
- **Mitral Stenosis** – If the mitral valve is narrow and leaks, blood has trouble passing from the left atrium to the left ventricle (where the blood pumps).

ORTHOPEDIC, NEUROLOGICAL, STRUCTURAL, AND JOINT PROBLEMS IN THE BREED

- **Hip Dysplasia** - Hip dysplasia is a painful condition caused by abnormally formed hips. The animal may become lame in the hind quarters due to the pain associated with the degeneration of the hips.
- **Elbow & Shoulder Dysplasia** - Elbow and Shoulder dysplasia encompasses several different conditions, all of which are indicative of abnormally formed or fused elbow joints or shoulder joints and all can cause lameness and pain:
    - **Fragmented Coronoid Process (FCP)** - This form of elbow dysplasia is generally the most difficult to treat if the fragments are actually loose in the joint.
    - **Osteochrondritis Dissecans (OCD)** - A defect in the joint cartilage overlaying or attaching to the bone. OCD most commonly occurs in the elbows, shoulders, hocks and stifles.
    - **Ununited Anconeal Process (UAP)** - In giant breeds such as Dogue the Anconeal Process can close later than in smaller breeds, often as late as one year of age or older.

- **Anterior Cruciate Ligament (ACL) Rupture** - The knee along with the external support (i.e., collateral leg) has two ligaments inside the joint that help prevent forward movement (i.e., cruciate). Insult/injury can cause this ligament to rupture and result in acute lameness (not want to bear weight) on the limb.
- **Hypertrophic Osteodystrophy (HOD)** - A developmental disorder that manifests with toes turning in or out, roached toplines, pinched rears, and in advanced stages fever, lethargy, pain in joints, inability to stand or function. This is a problem of intake in calories versus output of energy - too many calories consumed and/or unbalanced diet disrupted by supplementing.
- **Panosteitis (Pano or Wandering Lameness)** – A developmental problem that affects the long bones during rapid growth periods typically between 6-16 months of age. The exact cause is unknown although genetics, diet, stress, infection, and metabolic or autoimmune problems have been suspected. Lameness can occur in one limb or over time in all limbs. It often is intermittent affecting one leg then another and back again… It is self-limiting and spontaneously disappears.
- **Wobblers Syndrome** – Cervical Vertebral Instability (CVI) is caused by pressure and pinching of the cervical spinal cord and the nerves in the neck due to ligament problems and/or vertebrae malformation. The compression on the spinal cord in the neck may cause the Dogue to stand and move abnormally. This is believed to be an inherited genetic disorder with environmental influence. Rapid growth and nutrition may influence the expression of the disease.

EYE PROBLEMS IN THE BREED

- **Cataract** - Lens opacity that may affect one or both eyes and some forms may cause blindness.
- **Distichiasis** - Eyelashes abnormally located in the eyelid margin which may cause ocular irritation.
- **Ectropion** - Conformational eyelid defect, which may cause ocular irritation due to exposure.
- **Entropion** - Conformational defect where eyelid margins invert or roll inward, toward the eye causing eyelashes and hair to rub against the cornea which may result in ocular irritation and pain.

MISCELLANEOUS OTHER PROBLEMS IN THE BREED

- **Cancer** - Most forms of cancer have been diagnosed in some members of the breed. Cancer can be hereditary while others occur spontaneously or even due to environmental toxins. Although there are several forms of cancer found in Dogues de Bordeaux, the most common types are: Osteosarcoma (Bone Cancer), Lymphoma, Hemangiosarcoma, Mast Cell Tumors, Squamous Cell Tumors, & Breast Cancer. Today there are advanced medical treatment options such as radiation, chemotherapy and medications to reduce the size of the tumors and offer pain management to help maintain a good quality of life.
- **Allergies** – Some Dogues have allergies to certain foods, pollens, etc. Allergies are due to autoimmune problems and since they often run in certain lines they are believed to be inherited.
- **Gastric Dilation, Torsion, Volvulus (Bloat)** - Bloat is a hideous killer of giant breed animals, and Dogues are no exception. Without warning, the stomach fills with air (dilation), can twist 180 degrees (torsion) on its long axis, or more than 180 degrees (volvulus) thereby cutting off blood and oxygen to vital organs. Bloat can be primary or secondary, caused by emotional or physical stress, improper nutrition or feeding habits, guzzling water, inappropriate exercise, as well as other causes that we do not understand. Every Dogue owner needs to familiarize themselves with bloat symptoms and have a plan of action to get the animal to an emergency medical facility at the onset of the first symptom. A dog that is bloating often has approximately 3 hours to live without medical intervention.
- **Hypothyroidism** - Hypothyroidism is the result of an abnormally functioning thyroid gland resulting in a lower than normal level of thyroid hormone. This lack of thyroid hormone can have serious health consequences including coat and skin problems, intolerance to cold, weight gain or loss, infertility, sudden aggression, and immune system malfunctions. The inherited form is autoimmune thyroiditis where the body's own immune system attacks and destroys the thyroid gland or reduces its function. Autoimmune thyroiditis is diagnosed by measuring the FT4D, cTSH & TgAA. Acquired hypothyroidism can be caused by various problems such as stress for long periods of time, poor nutrition, prolonged infections, and chemical agents.
- **Epilepsy** – A seizure disorder which can have multiple causes. The age of onset of the inherited form is normally around 6 months to 5 years of age. Epilepsy is often difficult to treat successfully in Dogues and other large breeds.
- **von Willebrand's Disease (vWD)** - An abnormal bleeding disorder due to a lack of normal clotting. An animal's life can be threatened by bleeding due to an injury, or during spaying/neutering or any other condition resulting in bleeding.
- **Reproductive Issues** – There are several reproductive problems that can affect Mastiffs and it is encouraged that you research this area if you plan to breed. Some of the most common are pyometria (uterine infection), cryptorchidism (undescended testicles), failure to conceive, and vaginal hyperplasia.

TESTING AND RESEARCH INFORMATION: ORGAINIZATIONS, CONTACTS, AND REGISTRIES

Canine Health Information Center (CHIC) DNA Repository - Please donate DNA (blood or semen)

Phone: (800) 442-0418 E-mail: chic@offa.org Website: http://www.caninehealthinfo.org/

Cancer

Broad Institute of Harvard and MIT, Dog Genome Project
Fax: (617) 324-2722, e-mail: dog-info@broad.mit.edu website: http://www.dogDNA.org
Printable Brochure: http://www.broadinstitutte.org/mammals/dog/vet_samples.html

Hip, Elbow and Shoulder Dysplasia and Cardiac

Orthopedic Foundation for Animals (OFA), 2300 E. Nifong Blvd, Columbia, MO. 65201-3806
Phone: (573) 442-0418 Fax: (573) 875-5073 e-mail: ofa@offa.org
Website www.offa.org

PennHIP - University of Pennsylvania's Hip Improvement Program
Website: http://cal.vet.upenn.edu/projects/pennhip/index.htm
Phone: (215) 573-3176 e-mail: pennhipinfo@pennhip.org

Patellas

Orthopedic Foundation for Animals (OFA), 2300 E. Nifong Blvd, Columbia, MO. 65201-3806
Phone: (573) 442-0418 Fax: (573) 875-5073 e-mail: ofa@offa.org
http://www.offa.org/pl_overview.html

Epilepsy DNA Research

Canine Epilepsy Network, Liz Hansen, Coordinator of Veterinary Information
Dr. Gary Johnson's Lab - Department of Veterinary Pathology
College of Veterinary Medicine, University of Missouri
209 A Connaway Hall, University of Missouri, Columbia, MO 65211
Phone: (573) 884-3712 Fax: (573) 884-5414 e-mail: hansenl@missouri.edu
http://www.canine-epilepsy.net/

Eyes

Canine Eye Registration Foundation (CERF)
Phone: (217) 693-4800 e-mail: CERF@vmdb.org
http://www.vmdb.org/cerf.html

Thyroid

Recommended Lab for Thyroid Testing – MSU Diagnostic Center for Population and Animal Health, Michigan State University – Please request the **OFA Thyroid Registry Test** Phone (517) 353-0621

Dr. Jean Dodds, Hemo Pet
www.hemopet.org,

von Willebrand's Disease – von Willebrand Factor Assays (vWF)

AHDC, Cornell University College of Veterinary Medicine, Upper Tower Road, Ithica, NY 14853
Phone: 1-607-275-0622 Fax: 1-607-275-0720 http://diaglab.vet.cornell.edu/coag/