

Doberman Club of America



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THE CANINE HEALTH INFORMATION CENTER
Health Tested Parents for Healthier Puppies 🐾 Since 1966

Orthopedic Foundation for Animals



- Not-for-profit organization
- Established in 1966
- Result of philanthropist, John M. Olin's, dedication to the sporting breeds

OFA Objectives



- Collate and disseminate information concerning orthopedic and genetic disease of animals
- Advise, encourage and establish control programs to lower the incidence of orthopedic and genetic disease
- Encourage and finance research in orthopedic and genetic disease
- Receive funds and to make grants to carry out these objectives

The Orthopedic Foundation for Animals



- **Functions:**
 - Voluntary diagnostic service
 - Data bank for genetic health status for dogs and cats

OFA databases include



Hip Dysplasia
Elbow Dysplasia
Patellar Luxation
Legg-Calve-Perthes
Congenital Cardiac Disease
Thyroid
Congenital Deafness
Sebaceous Adenitis
Shoulder OCD

There are DNA databases for genetic diseases



- CLAD (Canine Leukocyte Adhesion Deficiency)
- CMR (Canine Multifocal retinopathy)
- CNM (Centro Nuclear Myopathy)
- EIC (Exercise Induced Collapse)
- Ceroid Lipofuscinosis
- Cerebellar Ataxia
- And many others

OFA charitable contribution



- Over 3 million in contributions since 1966



- The CHIC DNA Repository has supported \$100,000 in banking expenses
- Endowed scholarship at U. of Missouri CVM
- Funds vet student attendance at biennial CHF National Parent Club Health Conference
- Richard Fox Memorial Fund at Cornell Support summer research fellowships



- At recent annual meeting approved \$75,000 in new canine health research grants
- Funding is directed through Morris Animal Health Foundation and the AKC Canine Health Foundation



- Research areas include: genetic disease mapping studies for Cardiomyopathy, subaortic stenosis, cruciate ligament rupture, osteochondritis dissecans, renal dysplasia, cataracts and urinary stones

The Canine Health Information Center (CHIC)



Ofa -the canine health information center



- The largest health information data base in the world.
- Is parent club driven to recognize health problems apparent in specific breeds.
- List the health testing requirements and recommendations for each breed that is part of this program
- Currently 175 breeds of dogs and over 100,000 dogs participate in CHIC

Breed Specific



- Each breed has specific health concerns.
- These concerns may be recognized by individual owners, each parent club or in many cases by the veterinary community.
- Not all diseases have a known mode of inheritance.
- Not all diseases have a screening test.

Phenotypic tests versus genotypic tests



- These tests should be tailored to meet the need of a specific breed.
- Breed specific requirements typically consist of the inherited disease that are of most concern to the parent club and for which a screening test is available.
- Some tests are based on phenotypic evaluation- others are based on genotypic evaluation.

Phenotypic tests



- Radiographs of the pelvis and elbows to detect abnormalities associated with hip dysplasia and elbow dysplasia
- Eye examinations that look for retinal, corneal and lens diseases
- Cardiology examinations including auscultation and echocardiography and Holter monitoring
- Thyroid panels that evaluate thyroid function

Genotypic tests



- These tests are used for diseases that are known to be inherited on an autosomal recessive basis. The causative gene for these diseases has been identified.
- EIC (exercise induced collapse) – associated with a defect in the Dynamin-1 gene (DNM1 gene)
- CNM (centronuclear myopathy) – caused by a SINE insertion on a specific gene the PTPLA (protein-tyrosinephosphatase-like gene)

Genotypic tests



- prcd – progressive rod cone dysplasia in Labradors, Poodles, Portuguese Water Dogs, American Cockers, English Cockers, Australian Shepherd and many other breeds
- MDR1 – Ivermectin sensitivity
- Von Willebrand's Disease – Type I – Doberman Pinscher and many other breeds

What tests do I Use?



- Select tests that have the test methodology published and accepted in the scientific community
- A publication of the test in a peer-reviewed journal reflects relevance, accuracy and methodology
- Use the guidelines in CHIC to see what tests are relevant for your breed

Tailoring testing



- The purpose of the dog influences the testing that should be performed
- For breeders, all breeding animals should have the prescribed health tests and clearances but this is particularly important for stud dogs as they have a more dramatic population effect on a breed than a bitch.
- For individual owners, testing should relate to activities planned for this dog, i.e. agility, obedience, service dogs, etc. and also for the effect on the human – animal bond as well

Where to Test?



- The safest place to test for a recessively inherited disease is at the laboratory where the genetic test was developed.
- These researchers devote thousands of hours and dollars to design a test, identify normal, affected and litter mates of affected animals and test these animals for the likely candidate genes.
- Once a publication has been made many copy cat laboratories will offer the test undercutting the price charged by the original laboratory.

Hips



Year	Cases	Excellent	Good	Fair	Boderline	Mild	Moderate	Severe
2011	409	61	286	42	1	16	3	
		14.91%	69.93%	10.27%	0.24%	3.91%	0.73%	
2012	415	79	265	45	3	17	6	
		19.04%	63.86%	10.84%	0.72%	4.10%	1.45%	
2013	423	80	277	44		18	3	1
		18.91%	65.48%	10.40%		4.26%	0.71%	0.24%
2014	416	74	275	37	1	24	5	
		17.79%	66.11%	8.89%	0.24%	5.77%	1.20%	
2015	492	80	342	42		22	6	
		16.26%	69.51%	8.54%		4.47%	1.22%	

Elbows



Year	Cases	Normal	Grade 1	Grade 2	Grade 3	Borderline
2011	139	139				
		100.00%				
2012	171	170	1			
		99.42%	0.58%			
2013	185	184	1			
		99.46%	0.54%			
2014	184	184				
		100.00%				
2015	235	234		1		
		99.57%		0.43%		