



VIP RECOMMENDED GENETIC TESTS FOR MINIATURE AND TOY POODLES

In order to obtain a **CHIC** (Canine Health Information Center) number, the Poodle must have completed testing and be registered with the Orthopedic Foundation for Animals (OFA) in the following areas:

- Miniatures must have Progressive Retinal Atrophy (PRA) DNA testing from an approved laboratory, eye clearance by Canine Eye Registry Foundation (CERF), and hip dysplasia evaluation from an approved agency.
- Toys must have PRA DNA testing from an approved laboratory, eye clearance by CERF, and Patellar Luxation OFA evaluation.

The above tests are considered the minimum testing for breeding Toys and Miniatures. Please note that the dog does not have to successfully pass all the testing to receive a CHIC number. CHIC is only an indication that the breeder has tested the dog with all of the required testing.

Many breeders will perform additional testing on their stock. All testing is valuable and gives information regarding the breeder's interest in the future of his/her breeding program. Using the tools that are currently available will allow the breeder to successfully use the entire gene pool in combinations that provide for a continued future of the breed. Other testing currently available includes Legg-Calve-Perthes, Thyroid, and von Willebrand's Disease.

Also, there is a true difference in testing. Very little of our available testing is considered genotype (DNA results are actual genes). Most of our tests are considered to be phenotype (which means there is physical evaluation involved in the result of the test). For a full explanation, interpretation and use of phenotype testing, see the article found on the OFA web pages: <http://offa.org/hovanart.pdf>

RECOMMENDED TESTS (MINIATURES AND TOYS)

Orthopedic: Hip dysplasia (HD), Elbow and Legg-Calve-Perthes Disease

How: X-ray

When: At 24+ months for OFA Hip and Elbow certification, at 16+ weeks for PennHIP scores (although better scores may be had at 6 months or even 12 months), and at 12+ months for Legg-Calve-Perthes Disease for OFA evaluation.

Where: Many veterinarians are experienced in x-raying dogs' hips. These films are sent to the OFA registry for a reading. Only PennHIP certified orthopedic and radiological specialists can do the PennHIP films; however, all PennHIP results can sent to and certified by OFA.

Orthopedic: Stifles for patellar luxation

How: Palpation

When: At 12 months of age.

Where: Your local veterinarian or orthopedic specialist can do this examination and results should be certified by OFA. Orthopedic specialists (Diplomates) are certified from the American College of Veterinary Surgeons. The OFA recommendation is for all phenotype testing to be done by a specialist if possible. There are just over 100 of these specialists in the USA. Many states and areas do not have one available; therefore, OFA does accept examination from a veterinarian who has the “advanced training necessary to perform an accurate diagnosis.”

Eyes: For PRA and the other 21 inherited eye abnormalities found in Poodles, such as juvenile cataracts, entropion, ectropion, etc.

How: Annual eye examination and one time DNA testing.

When: At about 8 weeks of age, the OptiGen DNA tests can be done. The CERF examination may also be done at 8 weeks and is performed by a Board Certified veterinary ophthalmologist. Annual CERF exams may be done thereafter.

Where: By a veterinarian who is Board Certified by the American College of Veterinary Ophthalmologists for routine eye examinations.

Blood collection or swab collection information for your vet and forms for OptiGen are available from their web pages. There may be an eye clinic held in your area sponsored by a breed club.

The OptiGen *prcd* test is done on a small sample of blood, or from a cheek swab. The test analyzes the specific DNA mutation causing *prcd*-PRA. The OptiGen test detects the mutant, abnormal gene copy and the normal gene copy. The result of the test is a genotype and allows separation of dogs into three groups: Normal/Clear (homozygous normal), Carrier (heterozygous) and Affected (homozygous mutant). Affecteds and carriers must be bred only with normals to produce non-affected offspring.

Below is a chart that will tell you expected results from matings of tested parents of any recessive. The offspring will get one gene from each parent. The pairing determines the status of the offspring. In this example, affecteds are xx, carriers are xa and clears are aa.

Status	Affected	Carrier	Clear
Affected	xx	xx or xa	xa xa or
Carrier	xx or xa	xx or xa	aa
Clear	xa	xa or aa	aa

Blood: For Thyroid Malfunction

How: Blood sample

When: Subsequent to sexual maturity in males and between heat cycles (12 to 16 weeks following onset of heat) in females.

Where: Thyroid testing is difficult to do correctly so only a few laboratories are recognized by the Poodle Club of America CHIC program. For a list of those laboratories, go to the OFA website at <http://www.offa.org/thyinfo.html>.

Blood: For von Willebrands Disease (vWd)

How: Cheek swab

When: Anytime after birth (if both parents are certified clear then a “certificate by pedigree” may be issued to the offspring).

Where: VetGen

Most Toy and Miniature breeders do not perform the von Willebrands Disease testing. However, with continued combination breeding of Miniatures and Standards, the introduction of some Miniature problems into Standard lines and Standard problems into Miniature lines makes this test worth mentioning. Though rare, instances of this disease appearing in Toys and in Miniatures have been reported.

ADDRESSES

Canine Eye Registry Foundation (CERF):

The Veterinary Medical DataBases-VMDB/CERF
1717 Philo Rd.
P O Box 3007
Urbana, Illinois 61803-3007

Phone: 217-693-4800
Fax: 217-693-4801
E-mail: CERF@vmdb.org
Website: www.vmdb.org/cerf.html

Canine Health Information Center (CHIC)

Eddie Dziuk or Dr. Greg Keller
Orthopedic Foundation for Animals, Inc.
2300 East Nifong Blvd.
Columbia, Missouri 65201

Phone: 800-442-0418
Email: chic@offa.org
Website: www.offa.org

Erika Werne
AKC Canine Health Foundation
P.O. Box 37941
Raleigh, North Carolina 27627-7941

Phone: 888-682-9696
Email: caninehealth@akcchf.org

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Cornell Business & Technology Park
767 Warren Road, Suite 300
Ithaca, New York 14850

Phone: 607-257-0301
Fax: 607-257-0353
E-mail: genetest@OptiGen.com
Website: www.OptiGen.com

If they have not answered your email in 2-3 days, please resend your e-mail to OptiGen@clarityconnect.com. Some email servers are not accepted by their server "OptiGen.com".

You can also fill out a form directly on the website for e-mail.

Orthopedic Foundation for Animals (OFA)

2300 East Nifong Boulevard
Columbia, Missouri 65201-3806

Phone: 573-442-0418
Fax: 573-875-5073
E-mail: ofa@offa.org
Website: www.offa.org

PennHIP (University of Pennsylvania Hip Improvement Program):

PennHIP Analysis Center
20 Valley Stream Parkway Suite 267
Malvern, Pennsylvania 19355
Website: www.pennhip.org
Phone: 610-640-1244
Toll free 800-248-8099
Fax: 610-640-5754

Send all CDs of digital images to the following address (they cannot accept digital submissions through the website):

PennHIP Administrative Center
MJR-VHUP
Attn: Tom Gregor
3900 Delancey St.
Philadelphia, Pennsylvania 19104-6010

Thyroid:

Endocrine Diagnostic Section
Diagnostic Center for Population & Animal Health
4125 Beaumont Road, Room 122
Lansing, Michigan 48910-8104
Phone: 517-353-0621

Or any of the other labs listed at www.caninehealthinfo.org/thylabs.html

VetGen

3728 Plaza Drive, Suite 1
Ann Arbor, Michigan 48108

Phone: 734-669-8440

Toll Free: 800-483-8436 (US & Canada)

Fax: 734-669-8441

Website: www.vetgen.com/

For e-mail, fill out a form directly on the website www.vetgen.com/