

# **Health Screening and Chinese Shar-Pei**

## **What Every Chinese Shar-Pei Owner Should Know About the CHIC Program**

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***CHIC at a glance:***

The Canine Health Information Center is a database of consolidated health test results from multiple sources. It is jointly sponsored by OFA and the AKC Canine Health Foundation. Parent clubs determine a breed's specific requirements. Dogs meeting all the health screening requirements are issued CHIC numbers.\*

(\*OFA E News, November/December 2006, 1:2)

## **Health Testing and Chinese Shar-Pei**

The CSPCA recently accepted recommendations from the CSPCA Health and Education Committee to participate in the **Canine Health Information Center (CHIC) Program**. Because each breed faces different health challenges, the CHIC program identifies health screening tests that meet the needs and concerns of individual dog breeds. For Chinese Shar-Pei, screening procedures have been recommended against the following health concerns: hip dysplasia, elbow dysplasia, autoimmune thyroiditis and patellar luxation. A CERF exam is also recommended to identify various eye and vision abnormalities. Not all diseases have a genetic component or an available screening test. Informed breeders and puppy buyers know that screening tests are a resource to aide in the development of healthy and sound dogs. Breeders that have submitted evaluative information on their breeding stock have dedicated money and time to demonstrate their commitment to the Chinese Shar-Pei breed. A dog that has completed all five of the recommended screening procedures has earned the lofty status of “CHIC certification.” This article provides an overview of the CHIC program and information on the five screening tests recommended for Chinese Shar-Pei.

### **CHIC Goals** (from the CHIC website <http://www.caninehealthinfo.org/>)

- To work with parent clubs in the identification of health issues for which a central information system should be established.
- To establish and maintain a central health information system in a manner that will support research into canine disease and provide health information to owners and breeders.
- To establish scientifically valid diagnostic criteria for the acceptance of information into the database.
- To base the availability of information on individually identified dogs at the consent of the owner.

### **CHIC Benefits** (from the CHIC website <http://www.caninehealthinfo.org/>)

Once in place and accepted within the dog breeding community, the CHIC program offers benefits to breeders, buyers, parent clubs, and researchers.

- **For breeders**, CHIC provides a reliable source of information regarding dogs they may use in their breeding programs. In the future, breeders can begin to analyze the pedigrees of a proposed breeding for health strengths and weaknesses as well the traditional analysis of conformation, type, and performance strengths and weaknesses.
- **For buyers**, the CHIC program provides accurate information about the results of a breeder's health testing. For diseases that are limited to phenotypic evaluations, there are no guarantees. However, the probability that an animal will develop an inherited disease is reduced when its ancestry has been tested normal. Further, as more DNA tests become available and the results are entered into CHIC, the CHIC database will be able to establish whether progeny will be clear, carriers, or affected.
- **For parent clubs** considering establishment of health databases on their own, CHIC provides the answer with no upfront investment required by the club. The CHIC infrastructure is supplied and maintained by the OFA. The data is maintained in a secure environment by trained staff. The services are not subject to the time, technology, and resource constraints that parent clubs might face on their own. This frees parent clubs to focus on their core strengths of identifying health concerns, educating their membership, and encouraging participation in the CHIC program.
- **For researchers**, CHIC provides confidential and accurate aggregate information on multiple generations of dogs. CHIC information will also be useful for epidemiological studies enhancing our knowledge of health issues affecting all breeds of dogs.
- **For everyone** interested in canine health issues, CHIC is a tool to monitor disease prevalence and measure progress.

To participate in the CHIC program, all dogs must have a permanent identification of microchip, tattoo or DNA. The dog owner will have the choice of submitting the information to the open registry or a semi-closed registry. That is, no results will be made public without the consent of the owner. A CHIC number is issued when test results are entered into the database satisfying each breed's specific requirement, and when the owner of the dog has opted to release the results into the public domain. The CHIC number itself does not imply normal test results, only that all the required breed specific tests were performed and the results made publicly available. There is no need to submit anything to the CHIC program. The test results will automatically be picked up by the CHIC program from the OFA records. You would only need to send in paperwork to CHIC if you used a registry other than OFA and CERF, such as Penn Hips for your certification.

### CHINESE SHAR-PEI OFA statistics through December 2005

| Registry | Rank | Evaluations | Percent Abnormal | Percent Normal |
|----------|------|-------------|------------------|----------------|
| ELBOW    | 4    | 206         | 28.6*            | 69.4           |
| HIPS     | 65   | 8719        | 13.5             | 85.2           |
| PATELLA  | 4    | 96          | 19.8             | 80.2           |
| THYROID  | N/A  | 22          | 4.5**            | 90.9           |

141 Chinese Shar-Pei are entered into the CERF data base. No break down of statistics is available for CERF.

\*According to the data submitted to the OFA registries, Chinese Shar-Pei exhibit the fourth highest incidence of elbow dysplasia and patella abnormalities of all participating dog breeds. According to the OFA, Chinese Shar-Pei are at high risk for elbow dysplasia and the OFA recommends that Chinese Shar-Pei be screened prior to breeding.

\*\* Relatively few Chinese Shar-Pei have submitted samples to the Michigan State Univeristy database. According to the CSPCA Health Survey, Chinese Shar-Pei exhibit abnormal thyroid test results at a level closer to 11%.

## Screening Tests Recommended for Chinese Shar-Pei

### I. Elbow Dysplasia

Elbow dysplasia is a general term used to identify an inherited disease or any abnormality in the elbow of dogs. It has been identified as a health concern associated with Chinese Shar-Pei due to a relatively high incidence of affected dogs in the breed.

A Chinese Shar-Pei owner may suspect elbow dysplasia if a dog shows sign of lameness in the elbow area. However, a dog may show no signs of lameness or discomfort for long periods of time. In addition to genetic considerations, environmental factors such as weight gain and exercise level also enter in to the severity of the elbow dysplasia. An x-ray taken by a veterinarian and submitted to the Orthopedic Foundation for Animals can be evaluated to determine the soundness of the canine elbow joint. A dog must be 24 months old to get an official OFA certification. Dogs younger than 24 months can get a preliminary certification, but the testing will need to be done again after the dogs reaches 24 months to be qualified for an official elbow registration. The OFA will certify or rate the elbow (and the record may be submitted to the CHIC database). Your veterinarian may recommend that the dog may be anesthetized in order to properly manipulate the elbow for the x-ray. The owner might want to consider

having the hips and elbows done together to save on the cost of the procedure. The cost to submit elbow x-rays to OFA is \$25. When you send in hips and elbows together the cost is only \$35.

## **II. Hip Dysplasia**

Hip Dysplasia is a genetic disease that can cause various degrees of arthritis and hip joint degeneration and may eventually lead to pain and debilitation in affected dogs. It is somewhat common through out the dog world. It is difficult to predict how an animal may be affected by hip dysplasia, or if an animal will become lame due to pain. Some dogs are acutely affected by the pain associated with malformed hip joints, while other dogs enjoy a relatively pain free life. As with elbow dysplasia, an x-ray taken by a veterinarian and submitted to the Orthopedic Foundation for Animals can be evaluated to determine the healthiness of the canine hip joint. The OFA will certify or rate the hip joint (and the record may be submitted to the CHIC database). The veterinarian will recommend whether anesthetic be used, and can help identify the best x-ray to submit for evaluation. The fee for OFA certification is \$30, and your dog must be over 24 months old to receive an official OFA number. Dogs under 24 months can submit x-rays and will be given a preliminary hip rating. However if you do that, you should retake the x-rays after your dog turns 2 years old, and submit them for an official certification.

## **III. Patellar Luxation**

The patella, or kneecap, is part of the stifle joint (knee). In patellar luxation, the kneecap luxates, or pops out of place, either in a medial or lateral position. This is another test recommended for Chinese Shar-Pei due to a relatively high incidence of patellar abnormalities in the breed. Dogs may be unilaterally or bilaterally affected. Animals can be affected by the time they are 8 weeks of age, or problems may show up much later. Although the luxation or “knee problems” may not be present at birth, the deformities that cause these luxations are present at that time and are responsible for subsequent recurrent patellar luxation. Patellar luxation should be considered an inherited disease. A veterinarian can evaluate the laxity or looseness of the patella joint and can provide paperwork to certify or rate the patella. This can be done on a routine office visit. It does not require an x-ray, merely that the veterinarian manipulates the kneecap and check for looseness. A veterinarian can do this for a nominal charge. Dogs must be 12 months old to receive the official certification. The fee for the OFA application is \$15. This paperwork can be submitted to the OFA (CHIC) database. It might be wise to let the vet know that you would like the patellas certified at your appointment, so that he can have the proper forms available. Or you can also print out the form for the vet to sign on the OFA website, and take it with you. (See the downloadable forms at the end of this article.)

## **IV. Autoimmune Thyroiditis**

Autoimmune thyroiditis is a problem observed in some Chinese Shar-Pei. It has a variable age of onset, but tends to display symptoms at 2 to 5 years of age. Dogs may be normal for years, only to become hypothyroid at a later date. Dogs can express any number of the non-specific signs of thyroid dysfunction. A dog suffering from thyroid dysfunction may become more susceptible to immune-mediated or other diseases affecting various target tissues and organs. The prerequisite genetic basis for susceptibility to this disorder has been established in humans, dogs and several other species. Today, some 50 breeds are genetically predisposed to develop thyroid disease. The laboratory will evaluate the sample and indicate if the sample falls within the normal range. The information is then shared with the CHIC database. The CHIC registry data can be used by breeders in determining which dogs are best for their breeding program. Knowing the status of the dog and the status of the dogs' lineage, breeders and genetic counselors can decide which matings are most appropriate for reducing the incidence of autoimmune thyroiditis in the offspring.

A thyroid test involves having a blood sample drawn by a veterinarian and sent to a participating laboratory, along with the OFA application for Thyroid Certification. The fee to OFA for registering your thyroid results is \$15 for an animal that is over 12 months old. They also offer kennel discounts if you submit more than one dog. You either need to print the Thyroid Application form from the OFA website, or let your vet know in advance that you would like the Thyroid results certified by OFA, so he can have the application on hand. Vets and labs charge different amounts for this test, but generally it is under \$100. The laboratory will evaluate the sample and indicate if the sample falls within the normal range. If your results are within the normal range, you will receive a certification number in the mail.

## **V. CERF EXAMINATION - Eye and Vision Disorders**

As in humans, dogs are subject to a variety of eye and vision disorders. Some conditions are very common in certain breeds. Eye disorders seen in Shar-Pei include entropion, prolapsed gland of the third eyelid ("cherry eye"), corneal dystrophy--epithelial/stromal, glaucoma, cataracts, lens luxation and generalized retinal atrophy.\* Many of these disorders are genetic in nature, and may be passed on to future generations without diligent screening. Some eye disorders are able to be detected at relatively young ages, while other conditions do not generally appear until a dog is several years old. It is important to have an ophthalmologist examine a dog that may be considered for use in a breeding program. Most eye abnormalities present serious difficulties to dogs and their owners.

The CERF exam is painless and can be carried out quickly. Drops are inserted in the eyes, and the eyes are examined for abnormalities. You should be able to get a CERF test for \$50 or less. Clinics for CERF exams are frequently held at dog shows though out the country at a greatly reduced cost. If a dog has had a CERF exam, the form can be submitted to the CERF (CHIC) registry and become part of the database. The application fee is \$10.50 for the first submission. CERF certification is only good for a one year period. Recertification is \$8.50. Since some eye problems often show up with age, a yearly certification is recommended.

### **Additional resources and contacts:**

You can find information on health screening clinics with reduced costs, at various locations around the country, on the OFA website, by clicking on this link: <http://www.offa.org/clinics.html>. Also, dog show enthusiasts should review the dog show premium lists to see which shows are hosting health clinics. Many shows through out the country host health screening clinics in conjunction with their shows. In addition, breeders should review the applications and forms for the screening tests. There are significant discounts involved for submitting multiple tests for an individual dogs, and "kennel" discounts for submitting x-rays for multiple dogs at the same time.

### **Canine Eye Registration Foundation**

<http://www.vmdb.org/cerf.html>

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Link to search the database of OFA records: <http://www.offa.org/search.html>

Links for downloadable OFA forms: <http://www.offa.org/apps.html>

Link to Thyroid Testing Information from Michigan State University Diagnostic Laboratory – <http://animalhealth.msu.edu/Endocrinology.htm>

\*Data from CERF All-Breeds Report, 1991-1998 and the ACVO Genetics Committee, 1999.

This article describes procedures that may or may not require the use of anesthesia. Many Chinese Shar-Pei owners have concerns about the use of anesthesia on their dogs. The following link from Dr. Vidt's website provides additional information on this topic. <http://www.drjvw.com/newsletter/?view=1-2.php>