

HEALTH TESTING Q & A

Submitted by the Health Related Issues Committee

PATELLA TESTING

- **How old does my dog have to be?** One year of age². Preliminary testing may be done at a younger age, but a dog will not be eligible to receive an OFA number unless they are examined after one year of age.
- **Who can do the testing?** Your regular vet can perform the patella evaluation. You may also choose to use a board certified veterinary orthopedist.
- **Where can I find board certified specialists?**
It is possible to find health clinics at dog shows around the country that have specialists available to perform the examinations at reduced rates.

If you cannot find a health clinic at a show that is convenient for you, you may also choose to make an appointment with a local specialist at their veterinary clinic to do the testing at your convenience.

Search for board certified Orthopedic specialists:
<http://www.acvs.org/AboutTheACVS/DiplomateDirectory/>

- **How can I find out about upcoming health clinics?**
Some all breed and specialty dog shows and training clubs offer health testing-check premium lists and club newsletters for details. Many of the Kennel clubs and training clubs that put on dog shows have the same health clinics every year so once you learn about the annual health clinics in your area you can plan in advance to attend each year.

Here is a very well maintained directory of upcoming health clinics around the country listed by state:

http://www.cavalierhealth.org/health_clinics.htm

OFA's listing of upcoming clinics: <http://www.offa.org/calendar.html>

Where do I get the OFA forms to bring to the vet?

You can print them out from the OFA site: <http://www.offa.org/plappbw.pdf>

- **Does my chihuahua need to be microchipped in order to have the vet fill out the OFA form?** There is no requirement for permanent id when submitting test results. However, if a dog without permanent identification in the form of tattoo or microchip is issued an OFA number, that number will clearly indicate whether

or not that dog had permanent id and whether or not it was verified at the time of the exam.⁴

The AKC *does* require dogs to be permanently identified in the form of tattoo or microchip in order to include their results in the AKC database and on certified pedigrees.⁶

CHIC also requires permanent id in the form of tattoo or microchip and *any dog without permanent id at the time of examination will not be issued a CHIC number.*⁵

- **How do I register the results?** Bring an OFA form with you when you have your dog's patellas examined and have the veterinarian fill out the form at the time of the exam. Make sure the OFA form is fully completed and send it along with a copy of your dog's registration papers and fee required to the address listed on the application.
- **How are the patellas examined?** The dog is examined awake. The veterinarian manually feels for any degree of luxation in the patella and grades accordingly.
- **What do the different grades mean?**
 - Grade 0: there is no luxation.
 - Grade 1: the patella can be manually luxated but returns to the trochlea (groove) when released.
 - Grade 2: patellas luxate frequently without manual manipulation.
 - Grade 3: patellas are permanently luxated and the trochlear groove is very shallow or even flattened.
 - Grade 4 patellas are permanently luxated and the trochlear groove is absent or even convex.It is possible to have a dog with a different grade in each knee or one normal knee and one with luxation.
For a more detailed explanation of patella grading, see the OFA website:
<http://www.offa.org/patluxgrade.html>
- **Isn't patella grading subjective, so why should I bother?** Although it is technically possible to have variation in grading by different vets, it is still very important to know whether or not a dog's patellas luxate- regardless of the actual grade. Even though one vet may call it a grade 1 and another vet may call it a grade 2, the examination has still provided extremely valuable information- that the patella luxates.
- **Is the dog tranquilized or put under anesthesia for the patella exam?** No, the examination is done with the dog fully awake.
- **Do the patellas need to be x-rayed?** No, only a manual examination is required.

- **Can a bitch's heat cycle affect patella testing results?** According to board certified orthopedic specialists, No.

John A. Benson DVM, DACVS said "In my opinion, being in season would not affect the patellar grading. "

Catherine Briere DVM, MS, DACVS: "This is a very good question. The short answer is no: estrus should not affect results of an orthopedic examination for patella luxation. Therefore breeders and owners can have their dogs examined at any time during the ovarian cycle. While hormonal changes during estrus can affect tissue laxity, the magnitude of the effect is not enough to cause luxation of the patella in a normal dog. If the patella luxates, estrus or not, the finding is real and the dog has patella luxation."

According to Sue Casale, DVM, "There is no evidence to support an effect of the estrus cycle on laxity in the patella ligament or patella luxation grading. I know that there have been concerns in the past that estrus and pregnancy may affect the results of hip dysplasia screening radiographs due to an increase in hip laxity. This is based on studies from the 1960's where exogenous estrogen was administered to dogs likely resulting in supraphysiologic levels. There is no evidence that estrogen alters connective tissue or that estrus has any effect on the appearance of the hips on radiographs. A prospective study from the University of Pennsylvania (Hassingier, KA, Smith, GK, et al. Effect of the oestrus cycle on coxofemoral joint laxity. V.C.O.T 1997; 10:69-74.) examined this issue and concluded that although estrogen and progesterone levels fluctuated throughout the estrus cycle, there was no association between hormone levels and hip laxity. I would assume this to also be true with patella luxation although this has not been investigated directly. In addition, patella luxation grading is subjective and it is very unlikely that subtle changes in patella ligament laxity (should they even occur) would effect the grade assigned."

CERF EYE TESTING

- **How old does my dog have to be?** There is no minimum age for CERF certification⁷, but CHIC numbers are only issued to Chihuahuas that were tested after 12 months of age¹.
- **Who can do the testing?** Only a board certified veterinary ophthalmologist can do CERF testing.
- **Where can I find board certified specialists?**
It is possible to find health clinics at dog shows around the country that have specialists available to perform the examinations at reduced rates.

If you cannot find a health clinic at a show that is convenient for you, you may also choose to make an appointment with a local specialist at their veterinary clinic to do the testing at your convenience.

Veterinary ophthalmologists:

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

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Here is a very well maintained directory of upcoming health clinics around the country listed by state:

http://www.cavalierhealth.org/health_clinics.htm

CERF listing of upcoming clinics:

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

- **Where do I get the forms to bring to the vet?** CERF forms are supplied only by the examining veterinarian
- **Does my chihuahua need to be microchipped in order to have the vet fill out the form?** There is no requirement for permanent id when submitting test results. However, if a dog without permanent identification in the form of tattoo or microchip or DNA testing is issued a CERF number, that number will clearly indicate whether or not that dog had permanent id at the time of examination.

The AKC *does* require dogs to be permanently identified in the form of tattoo or microchip in order to include their results in the AKC database and on certified pedigrees.⁶

CHIC also requires permanent id in the form of tattoo or microchip and *any dog without permanent id at the time of examination will not be issued a CHIC number.*⁵

- **How do I register the results?** Request that the examining veterinarian fill out a CERF form at the time of the exam. Make sure the form is fully completed and send it along with a copy of your dog's registration papers and fee required to the address listed on the application.
- **How are the eyes tested?** Drops are placed in the eyes to dilate the pupils and the dog's eyes are examined in a dark room. The exam consists of indirect ophthalmoscopy (shining a bright light into the eye) and biomicroscopy (examination with a special microscope).
- **Can a bitch's heat cycle affect CERF results and it safe to perform the exam during pregnancy?** There is no interference from being in season, pregnant or lactating to the eye exam. The CERF exam and the dilating drops have no adverse effect on pregnant bitches.⁹

CARDIAC TESTING

- **How old does my dog have to be?** One year of age³. Preliminary testing may be done at a younger age, but a dog will not be eligible to receive an OFA number unless they are examined after one year of age. Innocent murmurs may be detected in puppies younger than 12 weeks, so it is recommended to have any preliminary testing done after 12 weeks of age.
- **Who can do the testing?** Your regular vet can perform the cardiac evaluation. You may also choose to use a board certified cardiologist.
- **Where can I find board certified specialists?**
It is possible to find health clinics at dog shows around the country that have specialists available to perform the examinations at reduced rates.

If you cannot find a health clinic at a show that is convenient for you, you may also choose to make an appointment with a local specialist at their veterinary clinic to do the testing at your convenience.

Here is a list of board certified cardiologists listed by state:

http://www.cavalierhealth.org/Cardiologists.htm#Click_on_a_state

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- **Where do I get the OFA forms to bring to the vet?**
You can print them out from the OFA site: <http://www.offa.org/cardappbw.pdf>

- **Does my chihuahua need to be microchipped in order to have the vet fill out the OFA form?** There is no requirement for permanent id when submitting test results. However, if a dog without permanent identification in the form of tattoo or microchip is issued an OFA number, that number will clearly indicate whether or not that dog had permanent id and whether or not it was verified at the time of the exam.⁴

The AKC *does* require dogs to be permanently identified in the form of tattoo or microchip in order to include their results in the AKC database and on certified pedigrees.⁶

CHIC also requires permanent id in the form of tattoo or microchip and *any dog without permanent id at the time of examination will not be issued a CHIC number.*⁵

- **How do I register the results?** Bring an OFA form with you when you have your dog's heart examined and have the veterinarian fill out the form at the time of the exam. Make sure the OFA form is fully completed and send it along with a copy of your dog's registration papers and fee required to the address listed on the application.
- **How is the heart tested?** The veterinarian listens to the heart with a stethoscope. If a murmur is found, further diagnostic testing will be recommended such as ultrasound, echocardiography with Doppler, etc¹⁰.
- **Can a bitch's heat cycle affect cardiac testing results?**

According to specialist James N. Ross, Jr. PhD, DVM, DACVECC, DACVIM "Probably not...Rarely, a bitch in heat could become anemic and that could result in a heart murmur that could be detected on auscultation. An echocardiogram would confirm that such a murmur is "physiologic" however, and the dog would be "cleared" if so."

Jean Betkowski DVM, DACVIM says "Being in season can affect the auscultation. They retain water (like us) and this can make them more prone to having a flow murmur or perhaps a mild mitral murmur. They certainly can still sound okay but if it's abnormal at that time and it's just a mild murmur, they can be rechecked when they come out of season to see if its still there."

According to Brad Moses, DVM, DACVIM "My reading and training background have indicated several things can lead to transient, physiologic murmurs which could give false readings on breeding exams. The list includes pregnancy, lactation, estrus, anemia, hyperthyroidism and fever. These would potentially cause false positives so if a bitch had no murmur it would not have to be checked again after going out of season. I would think estrus and lactation are probably the least likely to cause a false positive."

GENERAL INFORMATION

- **Why Should I health test my Chihuahua?**

Any Chihuahua breeder would benefit from knowing about the health of the dogs in their breeding program. If dogs are not health tested they could be unknowingly contributing genetic health issues into the gene pool.

If you are a member of the CCA you have signed a Code of Ethics pledge that states “(I pledge...) to keep myself informed in the areas of dog health and genetics and to carefully screen all breeding stock for hereditary faults or disqualifying defects, removing any questionable animals from my breeding program. This includes cardiac, patella and eye testing as recommended by the Canine Health Foundation’s CHIC program.”

- **Why should I submit my results to OFA or CERF?** If all Chihuahua breeders health tested their dogs and registered the results it could have a tremendous positive impact on the overall health of the breed.

Registering results is required in order for a Chihuahua to receive a CHIC number. CHIC stores health testing information on all dogs in their database. If enough breeders participated in the program, eventually breeders could research pedigrees of proposed breedings for health strengths & weaknesses based on health testing results.

Registering results can also give researchers information on multiple generations of dogs and help the Chihuahua Club of America identify health concerns & educate the membership.

Another benefit is that buyers will feel more comfortable knowing the health history of a dog before purchase.

CHIC

- **What is CHIC?** CHIC stands for Canine Health Information Center. It is a centralized canine health database that collects health information on individual animals from multiple sources- namely OFA and CERF.

Parent clubs decide on what testing should be required for their breed to receive a CHIC number.

- **What health testing is recommended for Chihuahuas?** OFA Cardiac, OFA Patella and CERF eye testing are recommended for all Chihuahuas¹.
- **What is the difference between OFA/ CERF and CHIC?** OFA is a database which specializes in orthopedic issues and other genetic diseases. CERF specializes in eye disorders.
CHIC is a database that collects information from all other databases in one convenient place and organizes that information based on breed. Health testing results are also conveniently displayed for all relatives of dogs in the database that have been health tested.
- **How do I get a CHIC number on my Chihuahua?** Your Chihuahua must have permanent identification in the form of microchip or tattoo to be eligible. Have patella, cardiac and CERF eye testing done on your Chihuahua and register the patella/ cardiac results with OFA and eye testing results with CERF. There is no need to apply for a CHIC number; it is generated automatically when results are submitted to OFA and CERF and a certificate will be mailed to you. There is no fee for a CHIC number.
- **Does a CHIC number mean my dog passed all the tests?** No, it does not mean the test results were normal. It simply means that the examinations were performed and the results were registered. The results of the testing will be public.
- **Why is a CHIC number important if even a dog with luxating patellas and a heart murmur can get a CHIC number?**
A CHIC number is not an indicator of good health, but rather an indication that a dog has had all applicable health testing performed and the breeder has shared those results in order to help other breeders make informed decisions and improve the health of the breed.

¹ <http://www.caninehealthinfo.org/brdreqs.html?breed=CH>

² <http://www.offa.org/patluxdx.html>

³ <http://www.offa.org/cardiacguide.html>

⁴ <http://www.offa.org/faq.html>

⁵ <http://www.caninehealthinfo.org/chicinfo.html>

⁶ <http://www.akc.org/about/faq.cfm?page=12#cerf>

⁷ <http://www.petplace.com/dogs/canine-eye-registration-foundation-cerf/page1.aspx>

⁸ <http://www.offa.org/patluxgrade.html>

⁹ <http://www.thedca.org/cerfbitch.html>

¹⁰ <http://www.offa.org/cardiacguide.html>