

# **Recommendations for Health Monitoring of the Alaskan Klee Kai**

Our breed continues to grow in popularity and number, and new breeders and owners are recognizing the need to carefully monitor the health and welfare of the breed. In response to questions about what to do, the Health and Medical Research Committee of the Alaskan Klee Kai Association of America has developed the following recommendations to guide the veteran breeder as well as the new breeder and owner. Remember, these are guidelines and not requirements. It is our belief that every breeder and owner should strive to eventually incorporate these guidelines into their own plan for monitoring the health and welfare of their Alaskan Klee Kai. Submitting results and participating in publishing of results on OFA and AKK Pedigree databases should be a goal of all breeders.

## **GUIDELINES FOR THE ALASKAN KLEE KAI**

-At age 3 to 7 days of life dewclaws are removed and a basic health exam is done by a qualified veterinarian.

-At 8 weeks of age a health assessment is done to include eyes, ears, mouth (teeth), lungs, heart, testicle status(males only) and check patellas bilaterally (refer to the Patellar Luxation OFA area).

-Vaccinations should be given according to your veterinarian's schedule however, do not allow the veterinarian to give both the rabies vaccine and the last set of puppy shots together because a reaction can occur. Reference "YOUR DOG" Cummings School of Veterinary Medicine at Tufts University, Volume XI, Number 6, pg. 12, June 2005, plus reports from several AKK owners whose puppies experienced a reaction.

- De-worming should be done on all puppies. However, follow the recommendation of your veterinarian for a schedule of dosing and frequency. If you live in those areas of the country that do not have the weather to support the usual intestinal parasites, your veterinarian may advise you that routine worming is not necessary. This is particularly true in the Southwest and other desert areas. Heartworm testing should be done on the puppy prior to starting them on heartworm medication before 6 months of age. However, if the mother has been on heartworm preventative medication, and you are in that part of the country where heartworm is not present, your veterinarian may advise you that testing may not be necessary prior to starting medication. Those living in areas where venomous snakes reside may want to consider vaccinating against snake bite. Please follow your veterinarian's advice.

-Factor VII DNA testing needs to be done on all AKK since Factor VII deficiency has been found within our breed. Testing can be done as early as 6 weeks of age, as long as there has been an interval of at least 3-4 hours from nursing until the DNA swab is done. Offspring of a breeding between parents that are other than Clear, should be tested to determine Factor VII status. Ideally, Factor VII Deficiency will be eradicated from the Alaskan Klee Kai breed rather quickly, as dedicated breeders seek to breed this health issue out completely.

- Frequently check your AKK puppy for retained baby teeth since these can present a problem if left unchecked as the dog matures and the adult teeth come in. This can interfere with the proper scissor bite in this breed if retained baby teeth are not removed by the time the puppy is 6 months of age or the adult teeth have grown.

-If you will be spaying or neutering your AKK puppy, consult your veterinarian about timing. Small breed males usually reach sexual maturity between 7-9 months of age; females sometime take a bit longer. There are advantages and disadvantages to early spaying and neutering. Reference information can be found at:

[www.naiaonline.org/pdfs/LongTermHealthEffectsOfSPayNeuterInDogs.pdf](http://www.naiaonline.org/pdfs/LongTermHealthEffectsOfSPayNeuterInDogs.pdf) Consult with your veterinarian.

-If the AKK is going to be used for show/breeding purposes, then neither the male nor female should be bred before the age of 12 months and only after the health exam and all testing is done and is within normal or acceptable limits.

- Initial health exam (for breeding suitability) should be done to be done on the Alaskan Klee Kai at 12- 15 months of age and not before that time. This recommendation is based upon the developing physical maturity of the Alaskan Klee Kai. Rationale: As a rough approximation, the human equivalent of a one-year-old dog is between about 10 and 15 years—a **one-year-old dog or cat has generally reached its full growth and is sexually mature, although it might still be lanky and need to fill in a more mature musculature, similar to human teenagers**. The second year is equivalent to about another 3 to 8 years in terms of physical and mental maturity, and each year thereafter is equivalent to only about 4 or 5 human years.<sup>[2]</sup>

Emotional maturity occurs, as with humans, over an extended period of time and in stages. As in other areas, development of giant breeds is slightly delayed compared to other breeds, and as with humans, there is a difference between adulthood and full maturity (compare humans age 20 and age 40 for example). **In all but large breeds, socio-sexual interest arises around 6-9 months, becoming emotionally adult around 15-18 months, and full maturity around 3-4 years**, although as with humans, learning and refinement continues thereafter. (Reference: UC Davis School of Veterinary Medicine)

- It is recommended that the following be included in the breeding suitability exam:

- Full blood panel (sometimes referred to as a Canine Comprehensive SuperChem). This blood panel will include all the liver function tests, CBC (complete blood count) plus T3, T4 and a Free T4, which are thyroid function tests. Reason for the full blood panel is to make sure that all values are within normal range and if isolated elevations are found, may warrant further elevation. This is also to establish a baseline against which future results can be compared. However, by doing this panel between at age 12-15 months, the AKK is mature enough that growth spurts are unlikely to render inaccurate liver function values. Owners and breeders alike must also keep in mind that certain values can be slightly elevated due to stress on the dog going to the veterinarian and having the blood drawn. All of this must be taken into account when lab work is being evaluated.
- Liver function tests such as the ALT and AST are affected by liver disease, but can be influenced by growth spurts as mentioned above, infection and health conditions. ALT elevation without AST elevation does not indicate liver disease, but does indicate that there likely is an infection present, commonly a urinary tract infection. Usual reference range for both ALT and AST is around 10-100; clinicians do not generally become concerned until the values are greater than 3 times the upper limit of normal, or over 300.
- Thyroid Panel is important because autoimmune thyroiditis is the most common cause of primary hypothyroidism in dogs. The disease has variable onset, but tends to clinically manifest itself at 2 – 5 years of age. Dogs may be clinically normal for

years, only to become hypothyroid at a later date. The marker for autoimmune thyroiditis, thyroglobulin autoantibody formation, usually occurs prior to the occurrence of clinical signs. Therefore, since the majority of affected dogs will have auto antibodies by 4 years of age, annual testing for the first 6 years is recommended. After that, testing every other year should suffice. Unfortunately, a negative at any one time will not guarantee that the dog will not develop thyroiditis. Reference OFA (Orthopedic Foundation for Animals Recommendations). Website: <http://www.offa.org>. Your veterinarian should have the blood work sent to the OFFA with the proper forms and blood work so they (OFA) can evaluate and send results to the owners of the AKK and results are available in a national database accessible to the public. An increasing incidence of thyroiditis is occurring in Siberian Huskies, and we do have this as one component of our foundation for this breed. Please refer to the **Siberian Husky Health Foundation** for more information in regards to this. Website is: <http://www.siberianhuskyhealthfoundation.org>.

- All AKK should be screened for Patella Luxation, since the American Eskimo breed is ranked 17<sup>th</sup> with this problem and the Schipperke is ranked 58<sup>th</sup>. Both of these breeds are in the foundation of this breed. Although the luxation may not be present at birth, the anatomical 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. Neonates and older puppies often show clinical signs of abnormal hind-leg carriage and function from the time they start walking; these generally present as grades 3 to 4. Young to mature animals with grade 2 to 3 luxations usually have exhibited abnormal or intermittently abnormal gaits all their lives but are presented in the clinic when the problem symptomatically worsens. Signs vary dramatically with the degree of luxation. So evaluation should occur initially at 8 weeks of age when the puppy has a basic health assessment done. If a dog is still found to be normal at 12 months of age or older, a breed database number will be issued to the dog from the OFA. The forms and paperwork must be obtained from the OFA and taken to your veterinarian for evaluation and sent by the veterinary office to OFA. A preliminary evaluation of dogs under 12 months is encouraged if the owner desires to breed at this age. However, the most opportune time to gather breeding data is at 6-8 weeks of age prior to the puppy's release to the new owner. Reference OFA (Orthopedic Foundation for Animals). Website: <http://www.offa.org>.
- Screening for Cardiac problems within the AKK breed is encouraged since heart murmurs have been found within our breed. Examinations performed in mature dogs are most likely to be definitive. This is especially true when considering mild congenital heart defects. Innocent heart murmurs are less common in mature dogs than in puppies and are less likely to be a source of confusion. Furthermore, the murmurs associated with some mild congenital malformations become more obvious after a dog has reached maturity. While it is quite reasonable to perform preliminary evaluations and provide provisional certification to puppies and young dogs between 8 weeks and 1 year of age, final certification, prior to breeding, should be obtained in mature dogs at 12 months of age or older. Reference OFA (Orthopedic Foundation for Animals). Website: <http://www.offa.org>.

These are recommendations for our breed to continue to keep it sound and thriving for generations to come.