

Executive Summary

2003 Chinook Health Survey

Compiled by the Chinook Owners Association, Inc.

The Chinooks Owners Association conducted an on-line Chinook health survey from March 30, 2003 to May 17, 2003. All known Chinook owners received a password to access the health survey. The survey collected health information on all living purebred and crossbred Chinooks and all Chinooks who were born after January 1, 1990 but who are no longer living. The full report is available on-line on the COA's Health Page at <http://www.chinook.org/health2.html>. What follows is a summary of the results.

General Statistics

235 dogs participated in the survey. 159 dogs were purebred (68%), 76 were crosses (32%). Of the purebreds, 93% were UKC registered. 79% of the crosses were COA registered through the Crossbreeding Program. 27 dogs (11%) were not registered with the UKC or COA. Currently, the registered population of purebreds and crosses is somewhere between 550 and 600. Thus, 35% to 38% of the breed's UKC and COA registered population participated in the health survey.

77% of the participants (n=182) identified their dogs by name and provided contact information. 94% of the dogs (n=221) participating in the survey were alive at the time of completion. 123 females and 112 males participated in the survey. Of the females, 70 were spayed, 53 were intact. Of the males, 66 were neutered, 46 were intact. Combined, 42% of the dogs were intact.

Dogs ranged in age from 14 years to a few months. 34 dogs were 10 years or older, 96 dogs were from 4-9 years of age and 116 dogs were under 4 years of age. 14 dogs in the survey were born after 1990, but had died. 43% of these dogs died due to accidents (4 were hit by cars). 14% (n=2) were euthanized for temperament problems. 14% (n=2) died of old age. Of the remaining 4 dogs who died because of illness, 1 died at age 13 of cancer, and 3 died between 3-4 years of age from unrelated health problems (hormone dysfunction, pancreatic abscess, tissue block in urinary tract). The survey did not demonstrate a notable lethal health issue in the breed.

91% of owners described their dogs as being in excellent or very good health. As few as 8% of owners rated their dogs in average health and only 3 dogs were reported in fair to poor health (1%). 69% of owners reported their dogs to be in excellent health. Of those rated with excellent health, the dogs spanned all coat colors, coat types, and gender. Crosses edged out purebreds, however, with only 65% of purebreds rated with excellent health compared to 78% of crosses rated with excellent health.

Coat colors were: 104 tawny black mask (44%); 39 tawny buff mask (17%); 39 all tawny (17%); 15 light buff (6%); 13 medium buff (6%); 9 tawny gray mask (4%); 8 black/tan (3%)(all rated in excellent health); 5 gray/tan (2%); 3 all white (1%) (all female crosses in excellent health). Gender and status played no role in color distribution.

Coat lengths were: 183 traditional (78%), 19 extra thick (8%), 18 long (8%), and 15 medium (6%). Of the 18 long coated dogs, 12 were female, 6 were male; 8 were crosses, 10 were pure. In long coated dogs, of 10 dogs x-rayed, no dysplasia was found, no dog reported loss of control, no dog had problems with kids, and all four females who attempted breeding conceived. Of the 15 medium coated dogs, 10 were female, 5 male; 6 were crosses, 9 were pure. In medium coated dogs, no dysplasia was found in 6 x-rayed dogs, no dog reported loss of control, no dog had skin problems, no dog had problems with kids, and all three females who attempted breeding conceived.

In general, an analysis of the raw health data for each health issue did not link any one characteristic to a particular health issue. For instance, one coat color, gender, status (cross/pure), etc, did not appear more frequently than another did in most health areas. There are three notable exceptions. One is length of coat. 14% of dogs were described as long or medium coated. This population had significantly fewer health and temperament issues than those with traditional coats. The other notable issues involve eye abnormalities. No crosses indicated any eye abnormalities and no females had cataracts. Only purebred males reported cataracts. While these trends may not ultimately bear out, they deserve further study. What follows is a synopsis of each health issue studied, listed in order of frequency.

Cryptorchidism – 32% of Males Affected

112 males participated in the study. 21 dogs were listed as not having either testicle descend, but comments indicate a number of these males were neutered early or acquired after neutering. Looking at the comments, the status of 8 of these 21 dogs cannot be determined and they were eliminated from this portion of the study. Of the 104 males who reported known testicle health, 71 males (68%) had two testicles descend. 20 males (19%) were bilateral cryptorchid (one testicle descending). 13 males, or 13% had neither testicle descend. Crosses experienced a slightly higher rate of cryptorchidism than purebreds.

Of the 54 dogs who reported knowing the age that testicles descended, 48% descended by 8 weeks, 30% descended by 3 months, and 7% by 4 months. 7 dogs took at least five but no longer than eleven months to descend. On average, males in the breed fully descend by age 3 months. Retained testicles were found in the abdomen (4 dogs) and near the kidney, groin, and bladder (1 each).

Breeding Females – 28% Have Trouble Conceiving, 43% Have Problems Whelping

In the last two years, 29 females in the survey attempted breeding, producing 31 litters. 21 of 29 females conceived and delivered puppies after breeding, an overall breed conception rate of 72%. In this area, there appears to be a distinction between crosses and purebred dogs. Only 1 out of 7 crosses failed to conceive (86% conception rate). 7 out of 22 purebreds failed to conceive (68% conception rate).

Of the 31 litters produced, 25 were through natural breedings, 4 through artificial insemination with fresh semen, and 2 with chilled semen. 170 pups were produced from all litters over the two-year period. Artificial insemination with fresh produced 13 puppies (5, 5, 4, 3), with chilled it produced 6 puppies (5,1)

24 litters, accounting for 132 puppies, were purebred, with an average litter size of 5.5. 7 litters, accounting for 38 puppies, were crosses, with an average litter size of 5.4. 43% or 9 females had difficulty whelping; 4 required c-section to deliver the pups. Only 3 pups demonstrated heart murmurs, but none carried the condition into adulthood.

Gastrointestinal Problems – 27% of Breed Affected, 11% Chronically

63 dogs reported having gastrointestinal problems. 33% of males reported problems with only 21% of females reporting the same. 43 report loose stools, 13 report constipation, and 29 dogs report problems with frequent vomiting; 10 dogs had at least two of these symptoms. 25 of the 63 dogs report chronic problems. For all but one dog, age of onset was between 1 and 3 years of age. Only 4 dogs were tested for allergies with no consistencies being reported. The frequency of the reported problems merits a more in-depth study related to this issue.

Skin Problems – 18% of Breed Affected, 9% Chronically

43 dogs reported some sort of skin problems. 17 dogs experience dry, itchy skin. 7 dogs experience hot spots. Age of onset was 1 year, and all but a few dogs had symptoms by age 3. 22 dogs have persistent skin problems. While 8 of these dogs were tested for allergies, no pattern emerged. 13 dogs with skin problems also report gastrointestinal problems (6%).

Temperament – 15% Affected

49% of dogs are described as outgoing; 24% are easy going; 12% are reserved. Thus, 85% of the dogs fit within the breed standard definition for temperament. 10% are shy, 4% are excessively shy, 0.4% is aggressive (n=1). Shyness was demonstrated in 5 dogs by urination, 13 dogs by shaking, 9 dogs by whining, 9 dogs by pacing, 13 dogs by running, 3 by fear biting (2 of 3 euthanized); several dogs demonstrate more than two of these issues when stressed.

45 dogs (19%) had problems meeting strangers. 4 dogs (2%) were aggressive toward strangers. 36 dogs (15%) had problems with new situations. 19 dogs (8%) had problems with other dogs. 5 dogs (2%) were aggressive toward other dogs. 15 dogs (6%) had problems with children. 10 dogs (4%) reported problems with cats. 7 (3%) Chinooks had bitten someone. 2 dogs (both excessively shy) were euthanized for aggression/biting.

Hip Health – 14% Affected by Dysplasia

133 dogs had at least one hip x-ray performed (57%). Of those x-rayed, 94 dogs were purebreds (71%), 39 were crosses (29%). 82 dogs had OFA ratings, 31 reported vet read ratings, 16 had GDC ratings, and 4 were rated by PennHIP. Several dogs were rated by both OFA and GDC or OFA and PennHIP. For dogs with ratings from two registries, the ratings were uniform from both registries.

86% of the dogs x-rayed did not demonstrate any hip dysplasia. 14% were rated as excellent, 57% were rated as good, and 15% were rated as fair. About 10% of the dogs had borderline or mild results. 4% of the dogs were rated as moderate or severe. Of the 6 dogs listed as seriously dysplastic, 5 of the x-rays were read by vets. Crosses and purebreds had essentially the same passing rates, although crosses had a much higher rate of “excellent” ratings – 18% compared to 12% of purebreds.

21 dogs have experienced some hip pain. Dogs experience stiffness and limping as symptoms. 7 dogs were 9 years or older at the age of onset of hip pain; 3 dogs were between ages 4 and 6; 7 dogs were ages 1-3.

Eye Problems – 12% Affected/6% Cataracts

97 dogs have had at least one eye exam (41%); 74 were purebreds; 23 were crosses. 83 dogs had normal results. 14 purebred dogs had abnormal results; 4 were female, 10 male. No crosses reported eye abnormalities. 2 of the 14 abnormalities resulted from non-genetic trauma (both male). Thus, the rate of affected dogs was 12%. 4 of the abnormalities reported are considered passing by CERF for the Chinook breed. These abnormalities are retinal folds (2 dogs) and “PPM” (persistent papillary membrane)(2 dogs). 2 did not report the diagnosis. 6 dogs had cataracts (all males); 3 of these had cataracts in both eyes. The rate of occurrence of dogs with cataracts is 6%. Only purebred males had cataracts; no female reported this diagnosis. Eye issues appear unrelated to hip problems. 12 of the 14 dogs with eye abnormalities had hip x-rays. 10 of the 12 had passing hips, one was awaiting results, and one was dysplastic.

Loss of Control – 9% Affected

20 dogs (9%) experienced at least one episode when the dog experienced a loss of control of its body. The dogs range in birth year from 1989 to 2003. All coat colors, genders, and status was represented as affected. No dogs with long or medium coats were affected. 4 of the 20 dogs had one-time episodes. 16 dogs, or 7%, had sustained issues with loss of body functions. Average age of onset was 2 years, with the youngest age of onset being 4.5 weeks to the oldest at 8 years.

All but 4 dogs reported the loss control of multiple functions. During episodes, 19 dogs lost the ability to stand; 10 dogs experienced involuntary movements; 9 dogs became disoriented; 7 dogs had some sort of temporary paralysis; 2 dogs lost consciousness; 1

dog lost bladder control. All but three dogs have been seen by a vet for treatment/diagnosis of reported symptoms. Only two dogs were seen by a neurologist. Only two dogs were diagnosed with a seizure disorder. Of the 20 dogs, 8 no longer experience loss of body functions.

For dogs who report on-going issues, the frequency of events varies. 2 dogs have monthly episodes, 4 have them every six months, and 2 have them annually. For 6 dogs, the event lasted less than 1 minute. For 11 dogs, the event lasted 1-5 minutes. 1 dog has events from 6 to 10 minutes. 1 dog has events for longer than 20 minutes.

Vaccination Reactions – 3% Affected

7 dogs (3%) had some reaction to vaccines, 2 were female, 5 male. Of the 7 dogs who had reactions, 2 experienced only mild edemas at the site of the vaccine.; 2 experienced swelling of the head associated with their first adult vaccinations; 1 dog had a reaction to a rabies vaccine, but did not offer more information. 2 dogs had severe reactions to rabies vaccines – one had bloody diarrhea, the other had swelling, fever, diarrhea and has lesser swelling related to parvo/distemper (both males). No seizures or loss of body control was associated with vaccinations.

Conclusion

In conclusion, the 2003 Chinook Health Survey demonstrated significant health issues related to reproduction, gastrointestinal distress, and skin problems in the breed. These issues have not previously been in the forefront of health discussions in our breed. The primary focus has been on hip, eye, and seizure disorders. While the latter health issues remain prominent disorders affecting the breed, the survey demonstrates our need to focus on other health issues as well. The COA remains committed to reducing all disorders affecting the breed. Using the data from this survey, the Health Committee will begin creating new health surveys that will focus discussion on each health issues. Your continued participation and support for these surveys will allow us to fully understand each problem. We thank you for your past participation and hope you will continue to participate in future health surveys.