

A very good first step in making progress in understanding which diseases are common and for beginning the study of genomeenvironmental relationships are health surveys, conducted by the Westie Foundation of America and also the West Highland White Terrier Club of America. The results of recent studies serve as an excellent starting point for discussion of diseases that follow.

It is now our job to find the specific genes in the Westie genome that are related to common diseases. Once this is done, more effective treatments for these diseases can be found, and concerned breeders, owners, veterinarians and scientists can work together to eliminate these problem genes, while maintaining happy, healthy populations of Westies for centuries to come.

Common Diseases of Westies

In 2005, the Westie Foundation of America and the Health Committee of the West Highland White Terrier Club of America conducted a study to determine the owner-reported prevalence of 27 diseases in West Highland White Terriers using an anonymous survey distributed by mail to approximately 6,000 homes owners and breeders in 2005. Follow-up mailings to non-responders were not conducted, as no effort was made to track returns. This was the result of a decision to make the surveys completely anonymous in an effort to increase response rates and the validity of reported information.

The results of that study were made available in 2007 on the Foundation’s website. In the report prepared by Dr. J. Kevin Grayson, author of the report, the following conclusions were made:

The prevalences of targeted diseases remain essentially unchanged between the 2000 and 2005 surveys. For some common diseases, such as: atopic dermatitis, deafness, luxated patella, and Legg-Perthes disease; the prevalences have actually increased. For others, such as: aggression, deafness, diabetes, and pulmonary fibrosis; modest decreases were realized.

Progress is being made at many veterinary schools on determining the mode of inheritance and new treatments for many of these conditions. Continued financial, data, and case material support for these programs will greatly benefit the breed in the future. Some of the interesting findings of the 2005 study are summarized below.

An ongoing health Survey (2012-present) can be found at www.offa.org. The WFA and West Highland White Terrier Club of America conducted the survey as a joint project. We encourage all Westie owners to participate in this survey answering for dogs both past and present. This information determines how the WFA designates how research dollars are spent.

Comparison of prevalence of targeted diseases in 2000 and 2005:

<u>2000</u>
Atopic Dermatitis
Aggression
Luxated Patella
Dry Eye
Legg-Perthes Disease
Craniomandibular Osteopathy
Pulmonary Fibrosis
White Shaker Syndrome, Addison’s Disease, Diabetes

<u>2005</u>
Atopic Dermatitis
Luxated Patella
Aggression
Inflammatory Bowel Disease
Legg-Perthes Disease
Dry Eye
Addison’s Disease
Lymphoma
White Shaker Syndrome

Targeted diseases ranked by prevalence among dogs by sex in 2005:

<u>Females</u>
Atopic Dermatitis
Luxated Patella
Aggression
Dry Eye
Inflammatory Bowel Disease
Legg-Perthes Disease
Addison's Disease
White Shaker Syndrome
Pulmonary Fibrosis

<u>Males</u>
Atopic Dermatitis
Luxated Patella
Aggression
Inflammatory Bowel Disease
Dry Eye

Targeted diseases ranked by prevalence among deceased dogs in 2005:

<u>2005</u>
Atopic Dermatitis
Pulmonary Fibrosis
Conjunctive Heart Failure and Lymphoma (tied)
Diabetes
Dry Eye (Keratoconjunctivitis sicca)
Luxated Patella and Inflammatory Bowel Disease (tied)
Copper Toxicosis, Aggression and Bladder Cancer (tied)