Disease	Alternate Names	Description	Symptoms
Allergies	Atopy Contact Skin Allergies Atopic Dermatitis Dermatitis Food Allergies	Reactions to allergens such as insects, pollens, and food	Itchiness, rashesmay chew feet and scratch lips and face
Bloat	Gastric Dilation-Volvulus	Stomach enlarges dramatically and then twists itself, sealing off the entry and exit of the stomach the spleen enlarges and causes torsion of the major vein bringing blood to the heart	EMERGENCY! Restlessness, abdomen is enlarged and feels hard, lethargy, pain, panting, pale mucous membranes, vomits foam and saliva
Cancer	Breast Cancer Hemangiosarcoma Malignant Histiocytosis Mast Cell Tumors	Hemangiosarcoma is the cancer most likely to affect our dogs	Hemangiosarcoma is a cancer of the blood vessels that may affect the spleen, heart, liver or skin.
Cauda Equina Syndrome	CES Spinal Stenosis Lumbosacral Malarticulation, Narrowing of Spinal Column, Lumbar Disc Disease	Spinal irregularities in the lumbar region of the spine that cause pressure on the Cauda Equina Nerve – painful disease	Painful tail that may appear "broken" – loss of neurological messages to hind end – may drag hind feet and eventually suffer loss of bladder and bowel control. This disease requires early detection and early intervention to prevent permanent nerve damage.
Elbow Dysplasia	E.D., F.C.P. (Fragmented Coronoid Process or Fractured Coronoid Process), D.J.D. (Degenerative Joint Disease), U.A.P. (Ununited Anconeal Process or Non-union of the Anconeal Process), O.C.D. (Osteochondritis Dissecans)	The term Elbow Dysplasia covers a group of developmental defects of the elbow joint that can occur in any area of the joint	May limp on front leg(s) – may have shortened stride. Usually diagnosed at time of OFA or OVC certification. Symptoms may or may not be immediately obvious, but this defect increases the risk of arthritis in the elbow.
Epilepsy	Seizures Fits	Primary or "true" epilepsy can only be diagnosed by ruling out other diseases that are known to produce seizures	Shaking, involuntary movement of legs, blank stare, rigidity
Exocrine Pancreatic Insufficiency	EPI, Malabsorption Syndrome, Pancreatic Acinar Atrophy, PAA, Pancreatic Hypoplasia	Pancreas does not produce enough of the enzymes that digest food	Diarrhea – chronic, excessive food intake but continues to lose weight, gassy stomach, flatulence
Fearfulness (Inappropriate)	Fear biter Aggressive	Fearful of things or events that do not bother other dogs. Includes fear of thunder, noise, people, and other dogs – may appear aggressive	Hiding, escape, growling, lunging, barking, biting
GSD Footpad Syndrome	Familial Vasculopathy of German Shepherds Soft feet.	May be severe in young puppies -less severe forms express as footpads that are thin and soft	Feet are swollen, crusty, ulcerated and have pigment loss – feet may bleed if dog walks on hard, rough surfaces
Heart Defects	Mitral Valve Stenosis (MVS),Patent Ductas Arteriosus (PDA), Pulmonic Stenosis (PS) Subaortic Stenosis (SAS), Tricuspid Valve Dysplasia (TVD) Ventricular Septal Defect (VSD), Patent Ductus Arteriosus (PDA)	Developmental heart defects present at birth each describes the part of the heart that is affected	Failure to thrive – weakness, coughing, murmurs, atypical heart rhythms, exercise intolerance, fluid in lungs, sudden death – may present as severe or may be undetected but will contribute to congestive heart failure eventually

Hip Dysplasia	HD CHD (Canine Hip Dysplasia)	Developmental malformation of the hip joint	Hind legs-gait is abnormal, may "bunny" hop Difficulty rising leg muscles may weaken
Inflammatory Bowel Disease	I.B.D Eosinophilic gastritis or enteritis Lymphoplasmacytic Enteritis or Colitis SIBO Enteritis Idiopathic colitis.	Inflammatory bowel disease describes inflammation of the digestive system inflammations will be named depending on the type of cells found and the area of the intestine that is inflamed - - symptoms vary with the area of the intestines affected	Chronic or frequent diarrhea there may be increased or decreased stool production and frequency, blood and mucous, vomiting, and weight loss
Megaesophagus	Megaesophagus Dilated esophagus Esophageal Achalasia	Esophageal muscles fail to force food into the stomach, esophagus is "stretched" or dilated	Regurgitation of undigested food, weight loss failure to thrive
Panosteitis	Eosinophilic Panosteitis, Pano Growing pains Growing Bones disease Enostosis	Pain in the long bones of the body during growth – This condition will resolve without treatment.	Pain in long bones of legs. Lameness that shifts from leg to leg. Fever, poor appetite and lethargy may be present
Perianal Fistula	Anal Furunculosis	Open, draining skin sinuses around the rectum	Difficulty defecating rectum has open soretail may be painful
Spondylosis Deformans	Spondylosis Arthritis of the spine Osteoarthritis of the spine	Abnormal fusion or bridging between the vertebrae of the spine	Stiffness upon rising

## Less Common or Rare Diseases That Have Been Reported

Disease	Alternate Names	Description	Symptoms			
Addison's Disease	Primary Hypoadrenocorticism	Adrenal cortex fails to produce glucocorticoid hormones	Weakness lethargy, collapse, diarrhea, poor appetite, shaking, shock, vomiting			
Aggressiveness (Inappropriate)	Idiopathic Rage Syndrome	Does not show fear. Dog will growl or bite without good cause	Growling, biting, threatening display			
Autoimmune Hemolytic Anemia	АНА	Immune system attacks red blood cells, causing anemia	Pale mucous membranes fever, lethargy, enlarged spleen, vomiting, weakness			
Cataracts		Clouding of the lens in the eye that will eventually lead to blindness	White haze over eyes			
Corneal Dystrophy	Cholesterol deposits	Deposits of lipids (fat) on the cornea of the eye. May interfere with vision.	White spots on eyes			
Cushing's Disease	Hyperadrenocorticism	Tumor of the Adrenal Glands or Pituitary Gland that causes an increase of Cortisol. These tumors are usually benign.	Increased thirst and appetite, hair loss, paunchy abdomen, weak muscles, increased urination			
Degenerative Myelopathy	DM Paralysis	Disease of the nervous system, similar to Multiple Sclerosis in humans not a painful disease, but is fatal	Weakness in hind legs and difficulty standing up – hind feet will drag and knuckle, hind leg muscle wasting. Loss of bladder and bowel control eventually affects front legs			
Demodex	Scabies Red Mange Mites Demodicosis Demodes	Demodex can be localized to small patches – it can also be generalized to the whole body and is a very serious form of this disease	Localized red skin patches and hair loss usually on face, ears, or legs. If generalized, hair coat will have a moth eaten appearance with hair loss.			

Discoid Lupus Erythematosus	DLE, Lupus of the skin, Cutaneous Lupus Erythematosus, Lupus, CLE	CLE that affects the skin. It is an auto-immune disease.	Red skin patches, Loss of nose pigment, Nose Ulcerated, Scaling skin on face, ears and feet, Sensitivity to ultraviolet light.
Esophageal Hypomobility		Esophagus fails to push food into the stomach	Delayed growth, respiratory infections, vomiting, weight loss
GSD Pyoderma	Folliculitis of the GSD Skin infection	Chronic, deep, skin disease, consisting of pus filled lumps and erosions of the skin that cause itching	Papules (raised bumps) on skin of back and hind legs erosions (surface sores) on skinhyperpigmentation (darkening of skin). Itchy, pus filled bumps, open sores (ulcers), may have poor appetite, weight loss, fever
Hypertrophic Osteodystrophy	нор	Bone disease of growing dogs, caused by a disturbance in the blood supply to the growth plate – microscopic fractures develop that cause pain and inflammation of the joints	Lameness, mild or severe, loss of appetite, dehydration, depression, fever, swollen joints
Imperforate Lacrimal Punctum	Epiphora Lacrimal puncta atresia Runny eyes Excess tearing	The Lacrimal punctum is the opening in the corner of the eye that drains tears – if this drain is blocked, tears will spill onto the face	Runny eyes may leave a rusty stain of face from tears
Luxation of the Tarsal, Metatarsal, and Intertarsal Joints	Luxation of the Hock	Hock joint is constructed of many small bones held together with many small ligaments luxation refers to separation of these joints	Hind leg is non weight bearing pain in lower hind leg – foot appears to "dangle"
Pannus	Superficial Stromal Keratitis	Pannus is an ongoing inflammation of the cornea, or surface of the eye	Grayish haze on eye
Pemphigus Foliaceus	Pemphigus	Autoimmune system attacks the skin itself — areas most commonly affected are the pads, nose, lips and eye rims	Rash, blisters, pustules and crusty sores – depression, fatigue, and swollen joints
Premature Closure of the Ulna	Bow legged	Ulna stops growing before the radius – radius continues to grow, causing the front legs to be misshapen	Front legs bow, wrists turn in and the feet turn outward
Primary Seborrhea	Seborrhea oleosa Seborrhea sicca Otitis externa	Outer layers of skin, sebaceous glands and hair follicles are over active causing the over-production of sebum (fatty lubricating substance) and skin cells. Primary seborrhea occurs in dogs under the age of 18 months	Chronic condition, skin is greasy, scaly and smelly ears have a waxy buildup
Thyroid Disease	Hypothyroidism Hashimoto's Disease Lymphocytic Thyroiditis Autoimmune Thyroiditis	Thyroid gland is attacked by the dog's own immune system	Obesity, poor hair coat, hair loss, lethargy and reproduction problems

Remember that "Uncommon symptoms of common diseases are more common than common symptoms of uncommon diseases"



Whether your dog is called a White Shepherd, a white German Shepherd Dog, a White Swiss Shepherd or a Berger Blanc Suisse, we welcome you to our family!

Our wish is for your dog to live a long, happy and healthy life as a treasured member of your family.

The Health and Genetics Project was developed to collect the health and temperament information of our dogs. This information is made available to breeders worldwide to help them plan breedings that will continue to produce healthy dogs.

This brochure outlines the diseases that were identified in our breed health survey. Should the need arise; we hope this information will help you and your Veterinarian identify any health issues that affect your dog. Early diagnosis and intervention can improve the treatment outcome of many of these diseases.

1. If your dog is diagnosed with any health or temperament issue, please submit the diagnosis to our Health and Genetics online database at <u>www.wsgenetics.org</u>. Contact Melanie Fuellgraf at <u>melanie@wsgenetics.org</u> or Judy Huston at judy@wsgenetics.org with any questions.

Don't forget to contact your dog's breeder too! Every breeder actively participating in the Health and Genetics Project has access to a wealth of information and can be a wonderful resource.

This Project is our gift to our dogs, in return for the loyalty and friendship they give to us.

This information is not intended to be used as a diagnostic tool, nor should it replace your relationship with your veterinarian.

Website: <u>www.wsgenetics.org</u> Discussion group: http://groups.yahoo.com/group/WhiteShepherdGenetics/

Donations to our education fund are greatly appreciated! *September 2003Issue*