

DISEASE RISKS BY BREED OF DOG

Many disease problems are genetic or inherited and certain breeds are at risk for certain diseases. Some of these can be tested for, enabling earlier diagnosis and intervention. Some simply require awareness on the part of the owner as to what to watch for and when to call the veterinarian. We try to make sure that every owner of an at-risk breed knows about the diseases and problems that could affect their dog. Here is a sampling of some of these problems.

ACL tear: A torn anterior cruciate ligament, or ACL is the most common orthopedic injury of active dogs. (You might also see this same ligament referred to as the cranial cruciate ligament or CCL.) It usually requires expensive surgery to repair. For a working dog, it can be career shortening, just as torn cranial cruciate ligament can be to football players. If not surgically corrected, severe arthritis eventually results.

It can occur in any breed, but those more at risk include Doberman pinschers, Rottweilers, Labrador retrievers and other large hunting breeds, Chow Chows, bulldogs, and any dog that has straight up and down hind leg conformation (as vs. slopey hind legs that angle backwards as in German shepherds).

Recommendations: A high quality diet strengthens muscles, ligaments, tendons & bones, and has been shown to reduce injury rates. Sensible exercise routines help prevent injuries, too. Just as in people, over-exercising without proper warm-up or conditioning can cause problems. Dogs that do a lot of leaping, as with Frisbee tossing or agility work, are also more vulnerable. Obesity is also a huge factor, as overweight dogs are much more likely to have injuries to joints and ligaments. Pet insurance is a good idea, as surgery and rehabilitation can be expensive.

Cardiomyopathy: Cardiomyopathy is the disease that leads to most human heart transplants. The heart becomes larger and thinner and weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm.

Breeds at risk include the Boxer; Cavalier King Charles spaniel and English cocker spaniel (100% are affected by age ten); Doberman pinscher (5% of Dobies die of this disease every year); all the giant breeds – St. Bernard, Great Dane, Irish wolfhound, Newfoundland, etc.

Recommendation for at-risk breeds: Annual ECG screening after age 1. If abnormalities are detected, an echocardiogram will confirm the diagnosis. For those breeds at highest risk, an echocardiogram, or ultrasound of the heart, should be done annually after age 5-6.

In Boxers, there may be a link between taurine deficiency & cardiomyopathy. A taurine supplement is recommended.

GDV: Gastric Dilatation and Volvulus, also known as “bloat” usually occurs in dogs with deep, narrow chests – Greyhounds, collies, Great Danes, German shepherds and many other breeds. When a dog bloats, the stomach twists on itself and fills with gas. The twisting cuts off blood supply to the



stomach, and sometimes the spleen. Left untreated, the disease is quickly fatal, sometimes in as little as 30 minutes.

Signs include retching or dry heaving; abdominal pain – grunting, laying in a “prayer position” with the front legs down and the back legs standing up; restlessness or distress; or a bulging out behind the ribs on the left side of the body.



Recommendation: Know what to watch for. If symptoms develop, rush your pet to an emergency clinic if one is available to you. They have a higher success rate for surgically repairing this problem because they do many more of them than the average practitioner. You must act quickly. The needed surgery is expensive, and one of the best reasons to have pet insurance. Don't let your dog exercise strenuously after meals, and feed 2-3 smaller meals per day vs. one large one.

Hemangioma and hemangiosarcoma: These are two of the more common tumors of older large breed dogs. The hemangioma is the non-cancerous form, about 30% of cases, and hemangiosarcoma is the cancerous kind. They are tumors that arise from blood vessels and usually occur in organs with lots of blood supply – the spleen is especially common, and the liver, kidneys, heart or skin may be other sites. These tumors fill with blood and then will break open and bleed.

Since they usually occur internally you cannot see the bleeding from the outside. You will see a dog that becomes pale and weak over a 6-24 hour period of time. He may become unable to walk or get up and breathing may become labored. You can also see a large or distended abdomen if the tumor is large – and some can be volleyball size or larger before the dog becomes ill.

Look at the color of the gums, tongue or inner eyelids if your dog shows these symptoms. If these look pale or white your dog probably needs emergency blood transfusions, and surgery to remove the tumor. If the tumor is benign, and in a location where it can be removed, surgery will be curative. If it is cancerous, the surgery will buy you time with your pet.

Recommendation: Know what to watch for and seek help if signs appear. We often find clues that one of these tumors is present on senior wellness testing, so have your senior dog's blood tested at least annually.

Respiratory Distress Syndrome: This disease affects brachycephalic dogs and cats – those with a squished in face, such as bulldogs, Pekingese, Persians and pugs. These breeds have the same amount of tissue in their noses and throats as other dogs and cats, but there is no place for it to go. As a consequence the soft palate – the soft part of the back of the roof of the mouth – is too long for the size of their mouth and hangs down into the airway. To add to their problems, their nostrils are often too small, and sometimes the trachea, or windpipe, is undersized.

All these things lead to a narrow and obstructed airway. Many of these dogs can barely breathe, have sleep apnea and snore, contract repeated respiratory infections, develop swelling and congestion in their throats that worsens the problem, and die at an early age. They are also more prone to heat stroke and have a higher risk for anesthetic complications.

Recommendation: Correct these defects with surgery early on, ideally at the time of spaying or neutering. The long soft palate can be shortened, the nostrils can be snipped open and more normal breathing will be restored. Some dogs are not affected enough to need surgery early on but become more problematic as they get older, in which case surgery can be done later on.



Neoplasia: Cutaneous hemangiosarcoma & histiocytoma, MCT – Client education, FNA all lumps
Ophtho: Cataracts; PRA

Australian Cattle Dog

Ophtho: Cataracts, lens luxation, PRA
Urolithiasis, cysteine – **annual U/A**

Australian Shepherd

Collie eye anomaly
Ivermectin sensitivity

Basenji

The Basenji breed associations have excellent materials on their website, so for Basenjis I generally just print something off the site.

Fanconi Syndrome - Client education, U/A & UPC annually
GI: Hypertrophic gastritis; PLE from lymphangiectasia; immunoproliferative enteropathy of Basenjis
Ophthalmic: PPM 40-90% prevalence - careful eye exams; cataracts; coloboma
PKD - **DNA test available**
Reproductive: 1 heat cycle per year
Uroliths, cysteine - **annual U/A**

Basset Hound

Derm: Otitis (excessive wax), seborrhea/malassezia; Ectropion/entropion; Lip fold pyoderma
GI: GDV – Client education; FB ingestion, esp. rocks
IVDD - wt. control, Client education
MCT - FNA all lumps
Orthopedic - UAP
Periodontal Disease, epuli, hyperplastic gums - frequent dentals, **Porphyromonas vacc.**, gingivectomy prn
Urolithiasis - cystine - **annual U/A**

Beagle

Cherry eye - Client education
Cushings - PDH
FB ingestion!! Client education
Glaucoma, often age 2-5. **IOP early on.**
IVDD - wt. control, O. education, restrict jumping up
Lymphoma
Periodontal Disease - frequent dentals, **Porphyromonas vacc.**

Bernese Mountain Dog

DCM- **annual ECG, annual echo > age 5**
Derm: Lip fold pyoderma
GI: Chronic diarrhea
GN - **annual urine Protein:Creatinine**
Neurological: Epilepsy – **genetic screening when available**



Orthopedic – ACL – Client education, Pet insurance; OCD - watch growth rate; Hip Dysplasia - 25% incidence - **X-ray early**, wt. control
Osteosarcoma- **X-rays if lame**

Bichon Frise

Entropion

Haemophilia - B or Factor IX def. - **BBT before Sx.**

IVDD - wt. control, restrict jumping - Client education

Periodontal Disease - frequent dentals, **Porphyromonas vacc.**

Urolithiasis, all kinds - **Annual U/A.**

Bloodhound/Coonhound

ACL tear – Client Education, Pet Insurance

GDV: Client education, **offer stomach tack w/ spay/neuter**

Hemangioma, cutaneous (bloodhounds, but not coonhounds)

Lip fold pyoderma

Ophtho: Cherry eye; Ectropion & entropion; KCS- **STT after age 9**

Border Collie

Drug sensitivity – ivermectins

OCD shoulders, more common in males, 50% are bilateral, onset usually 4-7 mo. of age

Ophthalmic: Cataracts age 4-6, PRA, Collie Eye Anomaly; Glaucoma from lens luxation, often at age 3-5 yrs

Boston terrier

Derm: Alopecia, atopy, Cushings (PDH) - Client education

Demodex - skin scrape early if symptoms

Dystocia - Client education if breeding

GI: Pyloric stenosis

Hydrocephalus

Neoplasia: MCT, Melanoma - FNA/remove all lumps

Ophthalmic: Cherry eye, Corneal ulcers, Pigmentary keratitis, Corneal dystrophy - Client education;

Cataracts – both juvenile & late onset; Iris cysts; Vitreal syneresis > glaucoma & cataracts; Proptosis

KCS - **STT early & often**

Periodontal Dz - frequent dentals, **Porphyromonas vacc.**

Respiratory dysplasia, including hypoplastic trachea - Client education, early surgery prn, **give estimate for soft palate surgery w/ spay/neuter estimate, DVM to intubate**

Bouvier des Flandres

Derm: Flank alopecia

Ophtho: Cataracts; Glaucoma - **annual IOP**

Orthopedic: ACL tear - Client education, Pet insurance; Hip dysplasia – **X-rays when young**; OCD

Neoplasia: Osteosarcoma – x-ray if lame; SCC

Boxer

Behavior: Males can be aggressive



Cardiac: Aortic stenosis; Arrhythmogenic Right Ventricular Cardiomyopathy – **genetic screening test**;
SSS; DCM/Taurine def. - **annual ECG/Holter monitor**
Derm: Alopecia, atopy, Cushings (PDH) - Client education; Lip fold pyoderma
Pododermatitis - check feet
Drug sensitivity: **No acepromazine**
GI: L-P colitis, food allergy, pyloric stenosis - Client education
GDV - **offer stomach tack at spay/neuter**
Neoplasia: Hemangiosarc, lymphoma, MCT, melanoma, SCC - **FNA/Biopsy everything!**
Ophthalmic: Cherry eye, corneal ulcers - Client education
Orthopedic: ACL tear - Client education, Pet insurance
Periodontal Disease, epuli & hyperplastic gums - frequent dentals, **Porphyromonas vacc.**,
gingivectomy prn

Brittany Spaniel

Hip dysplasia, 15th worst breed – **X-ray early**
Periodontal disease – frequent dentals, **Porphyromonas vacc.**

Bulldog, English & French

Derm: Alopecia, Demodex, Lip fold pyoderma, Pododermatitis, Skin fold excess
Dystocia - Client education if breeding
GI: Flatulence due to Respiratory dysfunction
Heat Stroke: No exercise in hot/humid weather, avoid car rides in hot weather
Hemophilia, French bulldogs – **BBT before Sx**
Hydrocephalus - Check for open fontanelles, R/O if signs
IMHA/IMTP - Client education w/ vaccine release
Neoplasia: Lymphoma, MCT, Brain tumors (French bulldogs) - FNA/Biopsy lumps
Ophthalmic: Cataracts (French bulldogs); Cherry eye, Corneal Ulcers - Client education; Distichiasis -
watch for signs; KCS - **STT annually**
Orthopedic: ACL - Client education, Pet Insurance. Hip Dysplasia - **X-rays early**, Client education;
Hemivertebrae – **x-ray spine w/ spay/neuter**, UAP
Periodontal disease – frequent dentals, **Porphyromonas vacc.**
Respiratory Dysplasia: **Client education w/ last puppy visit, give estimate for soft palate surgery
w/ spay/neuter estimate, DVM to intubate, X-ray for hypoplastic trachea**, avoid heat & heavy
exercise
Urolithiasis: Cystine or Urate - **annual U/A**

Bull Terrier

ACL – Client education, Pet insurance
Demodex – skin scrape suspicious lesions
Neoplasia: Actinic keratosis; MCT – FNA lumps
Urological: Familial renal disease, 1-8 yrs of age – **annual UPC**; PKD at 4-18 mo. of age

Cairn terrier

Derm: Atopy - Client education
Diabetes – Wt. control, Client education
GI: Portosystemic Shunt, polycystic liver Disease
Haemophilia: B, IX or Pyruvate Kinase deficiency – **BBT before Sx**



Ophthalmic: Refractory Corneal Ulcers, Ocular Melanosis, Lens Luxation, Cataracts, Retinal Dysplasia.
Orthopedic: Craniomandibular Osteopathy
Polycystic Kidney Disease - **annual U/A**
Repro: Cryptorchidism

Cavalier King Charles Spaniel

DCM, MVI: **ECG annually > 1 yr, echo annually once > 6 yrs old**
Ophtho: Cataracts as young adults; Lipid corneal dystrophy; KCS: **STT annually > 6 yrs**; Proptosis – Client education
Platelet abnormalities: Large platelets, low count – **Baseline CBC when young**
Respiratory dysplasia: Client education last puppy visit, **DVM to intubate**, soft palate surgery w/ spay/neuter or later on prn

Chesapeake Bay Retriever

Corneal ulcers - Client education
Haemophilia - Type III, **BBT before Surgery**
Hypothyroidism – **annual T4 after age 6**
Laryngeal paralysis – Client education
Orthopedic: ACL tear – client education, Pet insurance; Hip dysplasia- **X-rays early**, Client education;
OCD – Client education
Osteosarcoma- **X-rays if lame**

Chihuahua

Alopecia - Client education
Behavior: Often snappy w/ strangers & children
Hydrocephalus: Check for open fontanelles, R/O if signs
Melanoma: Remove suspicious lumps
MVI: Cardiac work-up when murmur arises
Ophthalmic: Cataracts, Glaucoma due to lens luxation
Orthopedic: Patellar luxation - Client education, careful exam
Periodontal Disease - frequent dentals, **Porphyromonas vacc.**
Tracheal collapse - X-ray to R/O if coughing
Urolithiasis, cysteine - **annual U/A**

Chow Chow

ACL tear: Client education, no jumping
Behavior: often aggressive, always muzzle for procedures
Derm: Stress alopecia; Growth hormone alopecia; Lip fold pyoderma; Mats, burrs & hot spots; Skin fold excess
Ectropion/Entropion: May require multiple surgeries to correct
Glaucoma, narrow angle, starting age 3-6: **IOP annually by age 3**

Cocker Spaniel

Behavior: Often fearful & snappy
Cardiac: DCM - **echos after age 6**; SSS - **annual ECG**; MVI, taurine def. - cardiac work-up & supplement taurine when murmur detected



Dermatology: Atopy: Follicular dysplasia - hair may not regrow after clipping. Lip fold pyoderma; Seborrhea, hyperpigmentation - R/O Vit. A def., food allergy, hypothyroidism
Haemophilia: Type B, IX or X - **BBT before Surgery**
IMHA, IMTP - Client education w/ vaccine release, sulfas
Ophthalmic: Cataracts, Cherry eye, Corneal ulcers, Glaucoma (narrow angle or DT lens luxation, starting age 3.5-9), KCS, PRA. **IOP & STT annually**, Client education
IVDD - Client education, no jumping, wt. control
Neoplasia: Lymphoma, melanoma - FNA/Biopsy all lumps
Orthopedic: ACL tears, patellar luxation - Client education
Otitis - Clean ears weekly, Client education
Periodontal Dz - Frequent Dentals, **Porphyromonas vaccine**
Urolithiasis: Struvite or Calcium oxylate - **annual U/A**

Collie

Collie Eye anomaly - eye screening if breeding
Derm: Dermatomyositis - R/O if dermatitis; Mats, burrs & hot spots
Drug sensitivity: Ivermectin - **use Interceptor/Sentinel, or genetic screening**
Food allergy
GI: Lymphoplasmacytic IBD in rough coated collies
IMHA, IMTP - Client education w/ vaccine release
Laryngeal paralysis
Neuro: Degenerative myelopathy – **genetic screening**

Corgi

Corneal ulcers - Client education
Degenerative myelopathy - R/O if signs appear, **genetic screening**
IVDD - wt. control, no jumping, Client education
Urolithiasis, cysteine - **annual U/A**

Dachshund

Behavior: Fearful
Cardiac: MVI, SSS - **annual ECG**, cardiac work-up w/ murmur
Cushing's Disease (PDH) - R/O if signs, Client education
Derm: Alopecia, Hypothyroidism, Malassezia, Seborrhea
Drug sensitivity: Lepto allergy is common - no Lepto if rxn
IVDD - Wt. control, no jumping, Client education
Ophthalmic: Corneal ulcers, Primary Glaucoma, usually age 4-9 - Client education, **annual IOP after age 4**
Periodontal Disease - frequent dentals, **Porphyromonas vacc.**

Dalmatian

ACL – Client education, Pet insurance
Behavior: Males may be aggressive
Derm: Atopy; Cutaneous hemangioma; food allergy; pododermatitis; solar keratitis
DCM – usually a mild form - **Annual ECG.**
Ophthalmic: PRA, KCS & Pannus - R/O if symptoms, **STT annually**



Respiratory dysplasia: Laryngeal paralysis, Elongated soft palate - **watch for signs, DVM to intubate**, Client education

Urolithiasis: Urate stones very common - **U/D recommended unless on other Rx diet, annual U/A**

Doberman pinscher

Behavior: Males may be aggressive; Flank Sucking, Lick Granulomas

DCM: Very common! - **annual ECG, annual echo > age 6**

Derm: Seasonal Flank Alopecia; Lick granulomas; Pemphigus; Zinc-responsive Dermatitis

Drug Reactions: **No Sulfas**

GI: FB; GDV – Client education, **offer stomach tack w/ spay/neuter**

GN - **annual Urine Protein:Creatinine Ratio**

Haemophilia: Von Willebrand's - **BBT before Sx, or genetic screening**

Hepatitis - **annual chem panel**

Hypothyroidism: Very common, often age 2-6 - **annual T4**

IVDD (cervical), Wobblers - R/O if signs

Ophthalmic: Cataracts, PRA

Orthopedic: ACL tear – Client education, Pet insurance

Parvovirus susceptibility: **extra Parvo vacc. at 5 mo., annual after that - no 3 yr Parvo vacc.**

English Cocker

Same as for American with the addition of high risk for cardiomyopathy – 100% incidence by age 10 - **Echo annually after age 6.**

Also familial renal Dz 6 mo. to 2 years - **UPC at age 6 mo. & Q 6-12 mo. x 2 yrs afterwards.**

English setter

Derm: Atopy - Client education; Lip fold pyoderma; Otitis – Client education

GDV – Client education

Ophthalmic: PRA

Orthopedic: Hip Dysplasia - **X-ray hips early**, Client education

Fox Terrier

Atopy - Client education

GI: Megaesophagus - R/O if vomiting

Glaucoma: Primary or lens luxation - **IOP annually**

Neoplasia: Fibroma; Hemangiopericytoma; Schwannoma; Insulinoma; MCT - FNA all lumps

German Shepherd

Behavior: Fearful or aggressive

Cushings: Both PDH & Adrenal

Derm: Food allergic otitis, often just 1 ear - Client education, regular ear cleaning. Pododermatitis, Seborrhea, Malassezia, Zinc-responsive dermatitis – work-up prn

GDV - Client education, **offer stomach tack w/ spay/neuter**

GI: Megaesophagus, SIBO, Lymphocytic-Plasmacytic or Eosinophilic IBD; Perianal fistula - thorough work-up for GI signs, usually multiple etiologies

Haemophilia: A & B or Von Willebrand's - **BBT before Sx, or genetic screening**

Hemangiosarcoma - Client education, **CBC w/ senior bloodwork**

IVDD: Thoraco-lumbar & lumbosacral



Lymphoma - Client education

Ophthalmic: Corneal ulcers, KCS, Pannus - **STT annually**

Orthopedic: Eo-Pan; Hip Dysplasia - hip x-rays while young; Degenerative Myelopathy - R/O IVDD (lumbosacral) also if signs, **genetic screening**; OCD

Masticatory Myopathy, Myasthenia Gravis; Panosteitis

Golden Retriever

Derm: Atopy, Food allergy, Lip fold pyoderma; Otitis, pododermatitis

Check feet, Client education, weekly ear cleaning

GI: Food all., Megaesophagus, FB ingestion - R/O if signs

Hemangiosarcoma - **CBC w/ senior bloodwork**

Hypothyroidism - **annual T4 >age 6, earlier prn**

Laryngeal paralysis – Client education

Neoplasia - lymphoma (cutaneous), melanoma, MCT - FNA or Biopsy all skin lumps

Neuro: Exercise-induced collapse (EIC) – **genetic screening**

Orthopedic – ACL tear – client education; Myasthenia Gravis - R/O if signs; OCD - watch growth rate, Client education, X-ray if signs; Hip Dysplasia - **hip X-rays while young**, Client education

Renal dysplasia - **annual U/A, chem panel when young**

Great Dane

Behavior: Fearful or aggressive

DCM, esp. males: **Annual ECG, annual echo > age 5**

Derm: Lip fold pyoderma; Pododermatitis; Zinc-responsive Dermatitis

GDV - Client education, **offer stomach tack at spay/neuter**

Hypothyroidism, age 2-6 - **T4 annually > age 2**

Ophthalmic: Ectropion/entropion; cataracts, typical onset 2 yrs old

Orthopedic: OCD, Wobblers

Osteosarcoma- **X-rays if lame**

Greater Swiss Mountain Dog

DCM, esp. males: **Annual ECG, annual echo > age 5**

Hypothyroidism - **T4 annually > age 5 or sooner prn**

Lip fold pyoderma

Orthopedic: ACL – Client education, Pet insurance; Hip dysplasia - **X-ray hips while young**; OCD,

Wobblers, OSA - X-ray if signs

Osteosarcoma- **X-rays if lame**

Great Pyrenees

Behavior: Fearful or aggressive

DCM, esp. males: **Annual ECG, annual echo > age 5**

Derm: Lip fold pyoderma; Pododermatitis, Zinc-responsive Dermatitis

GDV - Client education, **offer stomach tack at spay/neuter**

Hypothyroidism - **T4 annually > age 5 or sooner prn**

Orthopedic: ACL – Client education, Pet insurance; Hip dysplasia – **X-ray hips while young**; OCD,

Wobblers, OSA - X-ray if signs

Osteosarcoma- **X-rays if lame**



Greyhound

Derm: Alopecia, mostly females; Hypothyroidism - **T4 early & annually but be aware normal is lower for the breed**

Drug sensitivity: **Barbiturates - avoid use**

GDV: Client education, **offer stomach tack w/ spay/neuter**

Hypertension & High PCV - **Annual BP & PCV**

Ophthalmic: Pannus

Orthopedic: Polyarthritis, exertional myopathy - R/O if signs

Osteosarcoma - **X-rays if lame**

Periodontal Dz - Frequent dentals, **Porphyromonas vaccine**

Irish Setter, Gordon Setter

Derm: Atopy, Lip fold pyoderma; Malassezia; Mats, burrs & hot spots

GI: FB; GDV

Laryngeal Paralysis - Client education

Neoplasia: Sebaceous gland cysts, Hemangiopericytoma, Lymphoma, Melanoma, Insulinoma

Ophthalmic: Refractory Corneal Ulcers, Glaucoma, Cataracts, PRA

Irish terrier

Derm: Footpad hyperkeratosis

Neoplasia: Melanoma - Remove suspicious lumps

Irish Wolfhound

DCM – **annual ECG, echo annually after age 5**

GDV – Client education, offer stomach tack at spay or neuter

Hypothyroid, age 2-6 – **T4 annually**

Haemophilia: Von Willebrand's - **ACT before Surgery**

Ophthalmic: Cataracts ages 1-2 or 5-7, PRA

Orthopedic: Hip dysplasia – X-rays while young; OCD - watch growth rate, good diet; Patellar Luxation, Wobblers

Osteosarcoma- **X-rays if lame**

Italian Greyhound & whippet

Alopecia

Drug sensitivity – barbiturates

Broken legs – advise pet insurance

Ophtho: Cataracts, glaucoma about age 2 – **annual IOP**

Periodontal Dz - Frequent dentals, **Porphyromonas vaccine**

Jack Russel Terrier

Cushings: PDH

Diabetes: Wt. control, Client education

Malassezia

Ophthalmic: Cataract, Lens Luxation

Orthopedic: Patellar Luxation

Periodontal Dz - Frequent dentals, **Porphyromonas vaccine**



Keeshond

Derm: Stress alopecia; Mats, burrs & hot spots
Diabetes (older intact females most at risk) – Wt. control, Client education
Ophthalmic: Cataracts, Glaucoma - **annual IOP**
Nasal tumors

Labrador Retriever

ACL - Client education, avoid jumping, Pet Insurance
Cushings - Adrenal Tumors
Derm: Atopy, Contact Hypersensitivity, Food Allergy - R/O if signs, consistent diet. Malassezia, Otitis; Pododermatitis - check feet, good diet
GI: FB ingestion!! L-P colitis, Megaesophagus; Perianal fistula – work-up if signs occur, Client education re: pet proofing
Haemophilia: Type B or IX - **BBT before Surgery**
Hemangiosarcoma - Client education, **CBC w/ senior screens**
Hypothyroidism – can start very young, annual T4 > age 6 or sooner of signs
IMHA/IMTP: Client education w/ vacc. release
Laryngeal paralysis – Client education
Neoplasia: Lymphoma, MCT - FNA/Biopsy all lumps
Neuro: Epilepsy; Exercise-induced collapse (EIC) – **genetic screening**
Ophthalmic: Primary Glaucoma - **IOP annually > age 6**
Orthopedic: ACL tear – client education; OCD - watch growth rate, X-ray if signs; Hip Dysplasia - **X-ray while young**, Client education
Otitis - Client education, weekly ear cleaning

Lhasa apso

Cardiac: MVI – work-up if murmur develops
Derm: Atopy, food allergy - Client education; Lip fold pyoderma
GI: Pyloric stenosis
Neuro: Hydrocephalus, IVDD - Client education, avoid jumping
Ophthalmic: Cataracts; Refractory Corneal ulcers - Client education. PRA; Entropion; Distichiasis; KCS, pigmentary keratitis - **STT annually**. Cherry eye - Client education.
Periodontal Disease - **Porphyromonas vacc.**
Resp: Tracheal collapse
Renal: Dysplasia, uroliths - **annual U/A**

Malamute

Behavior: Strong prey drive
Derm: Demodex, generalized - skin scrape suspicious lesions; Follicular dysplasia; Zinc-responsive dermatosis
Diabetes: Older females - Client education
Hypothyroidism - **Annual T4**
Neoplasia: Anal Gland Carcinoma, Sebaceous Gland Tumors
Ophthalmic: Refractory Corneal Ulcers, Corneal Dystrophy, Cataracts, Glaucoma about age 6 - **annual IOP**, PRA

Maltese



Derm: Mats, burrs & hot spots
MVI: work-up if murmur develops
GI: Pyloric Stenosis
Glaucoma above age 6 - **IOP annually**
Hydrocephalus, Hypoglycemia - R/O both if CNS signs
Periodontal Disease - Frequent dentals, **Porphyromonas vacc.**

Mastiff

Cardiac: DCM – **annual ECG**
Derm: Lip fold pyoderma
Orthopedic: ACL, Hip dysplasia – **X-rays while young**; OCD, Wobblers
Osteosarcoma- **X-rays if lame**

Miniature Pinscher

Behavior: Fearful
Derm: Alopecia
Diabetes - Client education, wt. control
Ophthalmic: Pannus - **STT annually**
Periodontal Disease - Frequent dentals, **Porphyromonas vacc.**
Urolithiasis, cystine - **annual U/A**

Newfoundland

Cardiac: DCM – **annual ECG**
Derm: Lip fold pyoderma
Orthopedic: ACL, Hip dysplasia – **X-rays while young**; OCD, Wobblers
Osteosarcoma- **X-rays if lame**

Norwegian Elkhound

Neoplasia: SCC of skin
Ophtho: Cataracts; Glaucoma, avg. age of onset 4-7 years; lens luxation; Multifocal retinal dysplasia; PRA, starting at 6 weeks, vision loss by 12-18 mo.
Renal: Familial Renal Disease & Fanconi syndrome, 3mo.-5 yrs of age; Primary renal glucosuria – these dogs may have normal renal function despite glucose in urine.

Nova Scotia Duck Tolling Retriever

Hypoadrenocorticism - R/O if signs
Ophthalmic: Cataracts, PRA

Old English Sheepdog

Derm: Demodex, especially on paws - skin scrape if lesions; Lip fold pyoderma; Mats, burrs & hot spots; Pododermatitis;
Drug sensitivity: **Can be sensitive to Ivermectin, best to use Interceptor/Sentinel**
Haemophilia: Type B or IX - **BBT before Surgery**
Hip Dysplasia, 5th worst breed - **hip X-rays early**, wt. control
Hypothyroid, usually at 2-6 yrs - **T4 annually > age 4-5, sooner if signs**
IMHA/IMTP: Client education w/ vacc.
Ophtho: Cataracts, 6 mo. – 6 years; PRA at 4 yrs



Papillon

Behavior: Difficult to house train
Cardiac: MVI – W/U if murmur develops
Ophthalmic: Cataracts, PRA
Periodontal Disease - Frequent dentals, **Porphyromonas vacc.**

Pekingese

Derm: Flea allergy; Pododermatitis - check feet; Skin fold excess
Drug sensitivity: Rabies-vaccine-associated vasculitis and alopecia
GI: Pyloric stenosis; HGE, usually 2-4 yrs of age
Hydrocephalus: Check for open fontanelles, R/O if signs
IVDD: Wt. control, no jumping, Client education
MVI – work-up if murmur detected
Neoplasia: SCC
Ophthalmic: Cataracts; Corneal ulcers; KCS & pigmentary keratitis- **STT annually**, Client education;
Proptosis – harness, no choke collars
Ortho: Elbow dysplasia
Periodontal Disease: Frequent dentals, **Porphyromonas vaccine**
Repro: Cryptorchidism, umbilical & perianal hernias – check puppies carefully for these problems
Resp: Heat stroke; Respiratory dysplasia: **Discuss at last puppy visit, estimate for soft palate surgery w/ spay/neuter estimate, DVM to intubate**

Pit Bull Terrier

ACL tear - Client education, Pet Insurance
Behavior: Dog-aggression – Client Education
Parvovirus - extra booster at 5 mo. as puppy, annual Parvo vacc. as adults, no 3 year Parvo
MCT - FNA all skin lumps, Client education

English & German Pointers

ACL tear - Client education, Pet Insurance
Derm: Pododermatitis, Acral lick granulomas; Discoid lupus; acne; black hair follicular dysplasia;
Truncal solar dermatitis; Zinc-responsive Dermatitis
Haemophilia: Von Willebrand's - **BBT before Sx**
Neoplasia: Cutaneous hemangioma (English); MCT; nasal tumors (GSHP)
Ophtho: Pannus - **STT annual**; Cataracts – English at 2-3 yrs, Germans at 6-18 mo; PRA; Corneal dystrophy (English) at 6 yrs; Eversion of nictitating membrane (GSHP)

Pomeranian

Cardiac: MVI; SSS - **ECG annually**
Derm: Mats, burrs & hot spots; Pododermatitis
Hydrocephalus: Check for open fontanelles, R/O if signs
Hypothyroidism, age 2-6 – **T4 early**
Ophthalmic: Cataracts, PRA by age 6
Orthopedic: Atlantoaxial subluxation; Elbow dysplasia – Client education; Patellar Luxation,
Periodontal Disease: Frequent Dentals, **Porphyromonas Vaccine**
Repro: Cryptorchidism, inguinal hernias, testicular cancer – neutering recommended



Tracheal Collapse - X-ray trachea if coughing

Miniature, toy and teacup Poodle

Cardiac: MVI – work-up if murmur develops, include echo

Cushings: PDH & Adrenal

Derm: Alopecia, Cushing's Dz, Seborrhea, Malassezia; Otitis - regular ear cleaning & plucking; Anal sac disease, sometimes psychogenic

Diabetes - Wt. management, Client education

Drug sensitivity: Alopecia from injectable steroids, use oral if possible

GI: HGE in Toy & Miniature; Perineal hernia, intact males predisposed

Hemophilia: Von Willebrand's - **BBT before surgery**

Hydrocephalus - check for open fontanelles, R/O if signs

IMHA/IMTP - Client education w/ Vaccine Release

IVDD - Wt. control, no jumping, Client education

Neoplasia: Lymphoma, oral melanoma - check mouth carefully

Neuro: Epilepsy

Ophthalmic: Cataracts, Distichiasis & Glaucoma (Min. & Toy) - **IOP annually**; Pigmentary Keratitis - **STT annually**; PRA

Orthopedic: Legg-Calve-Perthes, Patellar Luxation

Periodontal Disease - Frequent Dentals, **Porphyromonas Vaccine**

Renal dysplasia - **annual U/A**

Repro: Cryptorchidism

Tracheal Collapse - X-ray trachea if signs

Urolithiasis: Struvite, Calcium Oxylate - **annual U/A**

Standard poodle

ACL - Client education, Pet Insurance

DCM, esp. Standards, > risk w/ age – **annual ECG**

GDV - Client education, **offer stomach tack at spay/neuter**

Hypoadrenocorticism – R/O if signs

Neoplasia: Insulinoma; oral melanoma - check mouth carefully; SCC of the toe

Ophtho: Cataracts

Otitis – Client education

Renal dysplasia – **annual U/A, chem. panel when young**

Zinc-responsive dermatosis

Portuguese water dog

Behavior: Males sometimes aggressive

DCM - Client education, **annual ECG**

Derm: Alopecia (pattern baldness at early age)

Ophthalmic: Cataracts; Distichiasis - R/O if corneal ulcers; PRA

Pug

Derm: Atopy, Alopecia - Client education; Skin fold excess

Dystocia - Client education if breeding

Heat stroke - no heavy exercise in hot/humid weather, avoid car rides in hot weather, Client education

Neoplasia: MCT, oral melanoma - FNA/Biopsy all lumps, check mouth carefully



Ophthalmic: Corneal ulcers, KCS - Client education, **STT annually**; Proptosis
Orthopedic: Legg-Calve-Perthes; Patellar luxation
Respiratory Dysplasia - **Discuss Surgery at last puppy visit, Rx soft palate surgery estimate to do w/ spay/neuter estimate, DVM to intubate**

Rat Terrier

Behavior: Often snappy
Patellar luxation
Periodontal Dz: Frequent dentals, **Porphyromonas Vaccine**

Rhodesian ridgeback

Derm: Zinc-responsive Dermatitis
Hypothyroidism – **T4 annually > age 6**
Laryngeal paralysis – Client education
Ophthalmic: Cataracts
Ortho: ACL – Client education, Pet insurance; Hip dysplasia – **x-rays when young**; OCD
Osteosarcoma- **X-rays if lame**

Rottweiler

Behavior: Males may be aggressive
GI: Eosinophilic IBD
Hypothyroidism – **T4 annually > age 6**
Neoplasia: SCC of the digit, Osteosarcoma- **X-rays if lame**
Ophthalmic: Cataracts age 2; Corneal ulcers - Client education
Ortho: ACL - Client education, Pet Insurance; Hip Dysplasia - **X-rays early**, Client education; OCD – Control growth rate
Parvovirus susceptibility: **extra Parvo vacc. at 5 mo. of age, annual Parvo vacc., no 3 yr Parvo**

St. Bernard

DCM – **annual ECG**
Derm: Lip fold pyoderma
Ortho: ACL - Client education, Pet Insurance; Hip Dysplasia - **X-rays early**, Client education; OCD – Control growth rate
Osteosarcoma- **X-rays if lame**
Otitis – Client education

Samoyed

Diabetes – **Weight control**, Client education
Ophthalmic: Cataracts age 2-4, Refractory Corneal Ulcers, Corneal Dystrophy, Primary Glaucoma - **IOP annually**

Schipperke

Diabetes – **weight control, annual blood & urine screening starting by age 4 (age of onset 4-14 years, avg. 7-9)**
Ophthalmic: Cataracts, PRA
Patellar luxation
Periodontal Dz: Frequent dentals, **Porphyromonas Vaccine**



Schnauzer

Behavior: Snappy, not always good w/ children/strangers, males worse
Derm: Atopy, Food Allergy, Seasonal Flank Alopecia, Comedo syndrome; Malassezia; Otitis
Diabetes: Wt. control, Client education, **annual blood & urine screening**
GI: Megaesophagus, HGE, Pancreatitis, Food Allergy
Lipemia - **12 hour fast before blood draws**
MVI - Cardiac work-up if murmur detected
Neoplasia: Melanoma, esp. of digits - Remove suspicious lumps
Ophthalmic: Cataracts; KCS - **STT annually > age 6**
Periodontal Disease: Frequent Dentals, **Porphyromonas Vaccine**
Portosystemic shunt - W/U if signs
Renal Dysplasia - **annual U/A**
Sick Sinus Syndrome - **ECG annually**
Urolithiasis: Ammonium Urate secondary to PSS, all other kinds as well - annual U/A

Giant Schnauzer

ACL- Client education, Pet Insurance
Cataracts
GDV- Client education, **offer stomach tack at spay/neuter**
Hypothyroid - **T4 annually > age 6**, sooner if signs
Giant Schnauzers SCC of digits

Scottish Terrier

Derm: Atopy - Client education; Demodex - skin scrape lesions
Dystocia - Client education if breeding
Hemophilia: B, IX & Von Willebrand's - **BBT before Surgery**
Neoplasia: Bladder cancer - **annual U/A**, Client instructions to not use lawn chemicals wh/ act as trigger; lymphoma; MCT; Melanoma - FNA/Biopsy all lumps
Orthopedic: Scottie Cramp; Osteopathy

Shar Pei

Behavior: Many are aggressive
Derm: Atopy - Client education; ; Demodex - skin scrape suspicious lesions; Food allergy - consistent diet;; Lip fold pyoderma; Malassezia; MCT at very young ages, FNA lumps early; Mucinous Dermatitis; Otitis; Seborrhea; Skin fold excess
Familial Shar Pei Fever - Client education
GI: GDV; Megaesophagus, HGE, Pancreatitis
Neoplasia: MCT at very young age, FNA lumps early
Ophtho: Entropion/ectropion, may need multiple surgeries to correct – Client education; cataracts; glaucoma – annual IOP; lens luxation
Ortho: ACL tear – Client education, Pet insurance; Hip Dysplasia - **X-rays early**, Client education
Renal Dysplasia: Amyloidosis - **annual U/A**

Shetland Sheepdog

Collie Eye Anomaly - Client education if breeding
Derm: Dermatomyositis – Biopsy if lesions; Malassezia - good diet & fatty acids; Seborrhea



Drug sensitivity: No Ivermectin, **use Interceptor/Sentinel**
Hemophilia: B, IX, Von Willebrand's - **BBT before Surgery**
Hip Dysplasia - **X-rays early**, Client education
Ophthalmic: KCS (**Normal STT is 16**) - **STT annually**
Orthopedic: Polyarthritits, Ligament Laxity
Periodontal Dz: Frequent dentals, **Porphyromonas Vaccine**
Repro: Cryptorchidism, testicular tumors

Shih Tzu

Derm: Atopy - Client education
Drug Sensitivity: **Alopecia from injectable steroids, use oral if possible**
IVDD - Wt. control, avoid jumping, Client education
MVI: work-up if murmur develops
Ophthalmic: Corneal ulcers; Pigmentary Keratitis, KCS - **annual STT**; Proptosis
Periodontal Dz: Frequent dentals, **Porphyromonas Vaccine**
Renal Dysplasia & Glucosuria - **annual U/A**
Resp: Tracheal collapse
Urolithiasis: All kinds - **annual U/A**

Siberian Husky

Behavior: Strong prey drive
Derm: Discoid Lupus; Eosinophilic Granuloma; Nasal Depigmentation - Biopsy suspected lesions;
Zinc-responsive dermatosis
Hypertension - **BP annually**
Laryngeal Paralysis - Client education
Neoplasia: Basal cell tumors, sebaceous gland tumors, Hemangiopericytoma, perianal gland adenomas, testicular cancer
Neuro: Epilepsy
Ophthalmic: Juvenile Cataracts; Corneal Dystrophy; Pannus - **STT annually**; Primary Glaucoma - **IOP annually**; PRA

Springer Spaniel

Behavior: Females may be fearful, males may be aggressive. Springer Rage Syndrome
Derm: Acral lick dermatitis; Food Allergy, Lip fold pyoderma; Malassezia; Seborrhea IMHA/IMTP - Client education w/ Vaccine Release
Neoplasia: Histiocytoma, Melanoma, Hemangioma (cutaneous), Anal Sac Carcinoma
Ophthalmic: Refractory Corneal Ulcers, Corneal Dystrophy, Glaucoma – **annual IOP**; Cataracts, PRA, KCS & Pannus all in English Springers – **annual STT**
Orthopedic: Hip Dysplasia - **X-rays early**, Client education; Myasthenia Gravis - R/O if signs
Urolithiasis: Calcium Oxylate - **annual U/A**; Sphincter incontinence in females

Vizsla

ACL tear – Client education, Pet insurance
GDV – Client education, **offer stomach tack w/ spay/neuter**
IMTP – Client education
Ophtho: Cataracts; Glaucoma – **annual IOP**; PRA



Weimaraner

ACL tear- Client education, Pet Insurance

Derm: Demodex - skin scrape suspicious lesions; Pododermatitis

GDV - Client education, **offer stomach tack w/ spay/neuter**

Neoplasia: Conjunctival melanoma; MCT; Osteosarcoma - **X-rays if lame**

Ophthalmic: Corneal ulcers - Client education; Conjunctival Melanoma - Surgery if found

Welsh terrier

Glaucoma, lens luxation – **annual IOP**

West Highland White Terrier

Derm: Atopy; Demodex; Food allergy - Client education, consistent diet; Malassezia, Seborrhea - good diet

Chronic hepatitis – **annual blood screening**

Ophthalmic: Cataracts; Corneal Ulcers - Client education; KCS - **STT annually**

Orthopedic: Legg-Calve-Perthes; Little White Shakers Disease

Polycystic Kidney Disease - **annual U/A**

Wheaton Terrier

Derm: Atopy, Food allergy - Client education, consistent diet; Malassezia, Seborrhea - good diet

Ophthalmic: Cataracts

Orthopedic: Legg-Calve-Perthes; Little White Shakers Disease

GN, Polycystic Kidney Disease - **annual U/A**

Yorshire Terrier

Cushing's: PDH

Drug sensitivity: **Alopecia from injectable steroids, use oral if possible.** Vasculitis at site of Rabies vacc.

GI: Portosystemic shunt, often microvascular

Hydrocephalus

Hypertension - **annual BP**

MVI: work-up when murmur develops

Ophthalmic: Cataracts as young adults; KCS - **STT annually**

Orthopedic: Atlanto-axial subluxation; Legg-Calve-Perthes, Patellar Luxation

Periodontal Dz: Frequent dentals, **Porphyromonas Vaccine**

Repro: Cryptorchidism

Tracheal Collapse - X-ray trachea if coughing

Urolithiasis: All kinds - **annual U/A**





BREED RISK RECOMMENDATIONS

AFGHAN HOUND



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

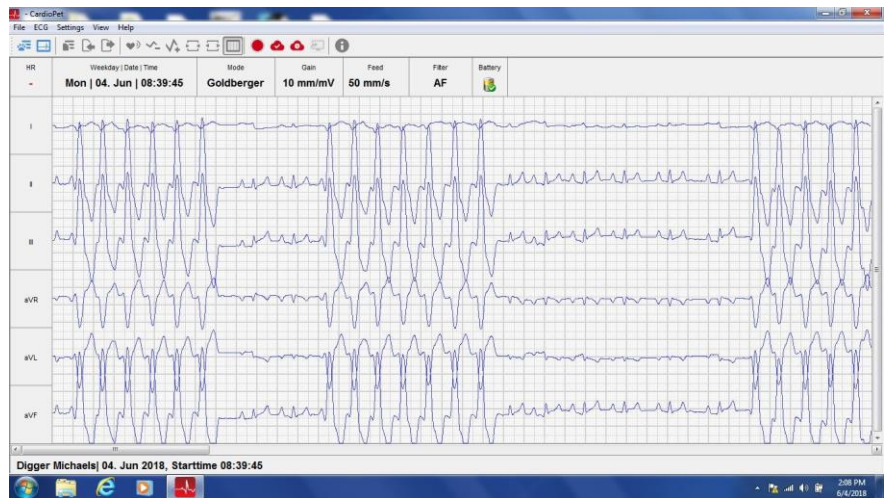
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



Hypothyroidism: many breeds are prone to this common condition, in which the body is not making enough thyroid hormone. It is most common in middle aged or older large breed dogs, though it has been documented in dogs less than a year of age, and in most breeds. Symptoms include dry skin and coat, hair loss, and susceptibility to other skin diseases such as seborrhea; weight gain; lethargy; mental dullness, sleeping excessively, fearfulness, aggression or other behavioral changes; high cholesterol levels. The lower the thyroid level, the more of these signs are likely to be present.

Treatment of the disease is simple. We supplement with oral thyroid medication that artificially replaces the hormones the dog is not producing.

Recommendation: Blood testing annually beginning at age 4-6, the age when many Afghans start to develop this problem.

Videos: adult - GDV, senior - Arthritis



BREED RISK RECOMMENDATIONS

AIREDALE TERRIER



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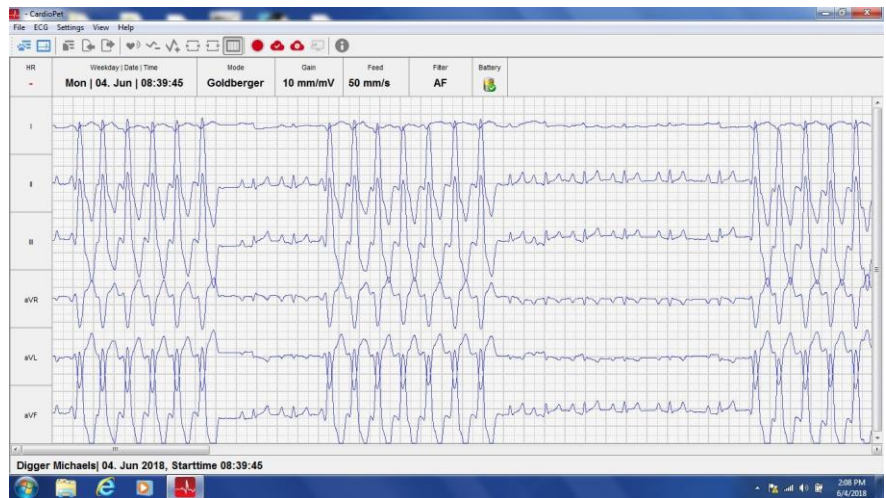
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Treatment of the disease is simple. We supplement with oral thyroid medication that artificially replaces the hormones the dog is not producing.

Recommendation: Blood testing annually beginning at age 6-9, sooner if symptoms develop.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.



Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.

Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.



Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a **complete blood count**. Blood testing at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Videos: What Is Breed-Specific Wellness; Senior - Eye Diseases, Arthritis



BREED RISK RECOMMENDATIONS AKITA



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Diabetes is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: **Annual blood and urine screening**, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness. In Beagles glaucoma usually starts between the ages of two and five.



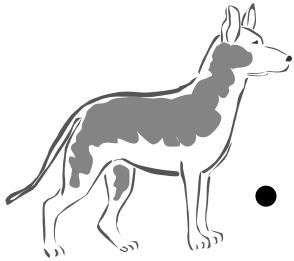
Recommendation: **Annual glaucoma screenin**. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: **Annual thyroid blood level after age 7**, sooner if symptoms develop.

Videos: what Is Breed-Specific Wellness; Senior - Eye Diseases, Arthritis, Fatty Acids





BREED RISK RECOMMENDATIONS

AUSTRALIAN CATTLE DOG



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Urolithiasis: “Uro” refers to the urologic system, “lithiasis” is stone formation. Uroliths are bladder or kidney stones. There are half a dozen different types of stones that can form, and certain breeds of dog are prone to certain types of stones. Cattle dogs are prone to stones made of cysteine.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: What Is Breed-Specific Wellness; Seniors – Arthritis, Fatty Acids



BREED RISK RECOMMENDATIONS

AUSTRALIAN SHEPHERD



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

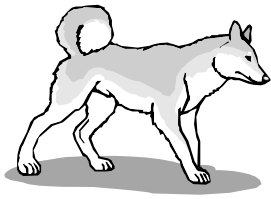
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Drug Sensitivity: Some breeds of dogs do not do well with certain medications. Herding breeds can inherit a gene called MDR1, that affects how they process about twenty different drugs, some of which are commonly used. These drugs should be avoided in these breeds but we can't know to do that without genetic testing.

Recommendations: MDR1 DNA testing should be done once, early in your dog's life.

Videos: MDR1; Seniors – Arthritis, Fatty Acids





BREED RISK RECOMMENDATIONS

BASENJI



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Fanconi Syndrome: Basenjis have a serious inherited disease problem called Fanconi Syndrome. Excellent materials are available at Basenji Breed Association websites (try Basenjicompanions.org, Basenjiclub.com or caninegeneticdiseases.net). It is important that you understand this disease and how to monitor for it.

Recommendations: Basenjis should be **urine tested monthly for urine glucose (sugar), ketones and protein**, any of which will start to show up in the urine when Fanconi Syndrome begins. Test strips can be purchased through your veterinarian and are simple to use. Catch a teaspoon or two of urine from your dog, dip the little test strip into the urine and compare the color change on each little test pad with the results key. Any positive findings should be reported to your veterinarian. If diagnosed and treated early it is very treatable. If diagnosed late, irreversible kidney damage results and is usually fatal.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. There are half a dozen different types of stones that can form, and certain breeds of dog are prone to certain types of stones.

Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: Check Basenji website



BREED RISK RECOMMENDATIONS

BASSET HOUND



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: **DNA test when a pet is young.** If no DNA test has been done a **Buccal Bleeding Time** can be done at the time of surgery. There is also a specific blood test for Von Willebrand's disease prior to surgery.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

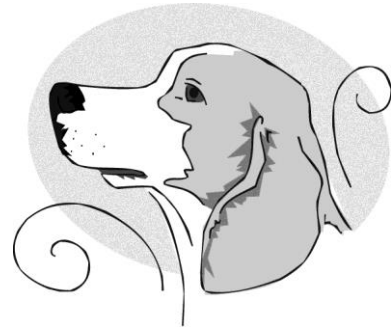
Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: What Is Breed-Specific Wellness, How to Clean Ears; Seniors – Arthritis, Fatty Acids



BREED RISK RECOMMENDATIONS

BEAGLE



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Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness. In Beagles glaucoma usually starts between the ages of two and five.



Recommendation: **Annual glaucoma screening** for all adult and senior Beagles. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a **complete blood count**. **Blood testing at least twice a year after age 5** may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Videos: IVDD, Eye diseases, Periodontal Disease



BREED RISK RECOMMENDATIONS

BERNESE MOUNTAIN DOG



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

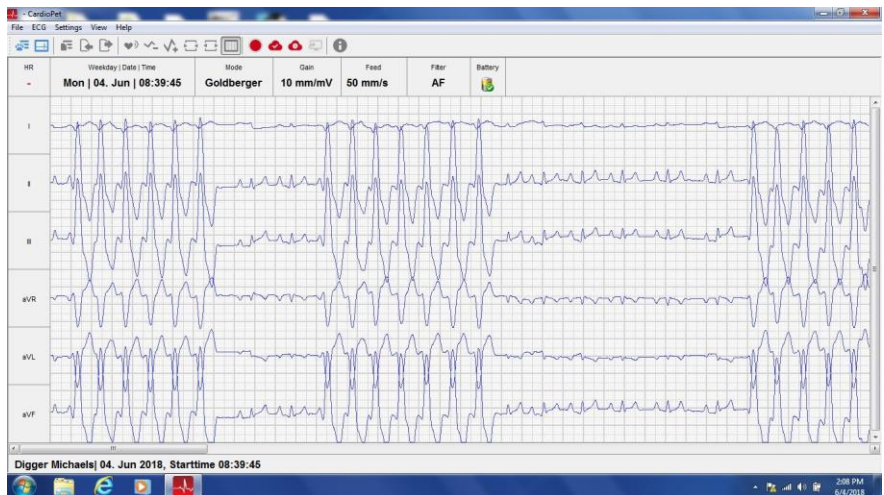
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



Glomerulonephropathy: GN is an inherited form of kidney disease. It slowly damages the kidneys, so affected dogs suffer kidney failure, often at an early age. Various infections and other illnesses can also lead to GN.

Damaged kidneys leak protein, so the disease is diagnosed by testing for excessive protein in the urine. The earlier the disease is diagnosed, the more we can help your pet. Urine samples should be checked annually for excess protein levels. Special diets help to support kidney function, thereby lengthening & improving life.

Recommendation: Annual protein/creatinine ratio urine test after age 1.

Videos: What is Breed-Specific Wellness, GN in Wheatens, Fatty Acids, Arthritis



BREED RISK RECOMMENDATIONS

BICHON FRISE



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: **DNA test when a pet is young.** If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal disease



BREED RISK RECOMMENDATIONS

BLOODHOUND/COONHOUND



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.

Videos: Eye Diseases, Arthritis, Fatty Acids, How to Clean Your Dog's Ears



BREED RISK RECOMMENDATIONS BORDER COLLIE



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Drug Sensitivity: Some breeds of dogs do not do well with certain medications. Herding breeds can inherit a gene called MDR1, that affects how they process about twenty different drugs, some of which are commonly used. These drugs should be avoided in these breeds but we can't know to do that without genetic testing.

Recommendations: **MDR1 DNA testing should be done once**, early in your dog's life.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: **Annual glaucoma screening** for senior border collies. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.

Videos: MDR1; Seniors - Eye Diseases, Fatty Acids, Arthritis



BREED RISK RECOMMENDATIONS

BOSTON TERRIER



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

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Recommendation: Annual glaucoma screening for adult and senior Boston terriers. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

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Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Videos: Periodontal Disease; Seniors - Eye Diseases





BREED RISK RECOMMENDATIONS BOUVIER DES FLANDRES



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

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Recommendation: Annual **glaucoma screening** for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Videos: Fatty Acids; Seniors - Eye Diseases, Arthritis





BREED RISK RECOMMENDATIONS BOXER



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Arrhythmogenic right ventricular cardiomyopathy: This is an extremely dangerous form of heart disease, known as ARVC. It causes an abnormal heart rhythm which is usually eventually fatal. In the early stages the heart will have a few abnormal beats, called ventricular premature contractions or VPCs, here and there. These become more and more frequent, often occurring in clusters, and eventually there are no normal heart contractions occurring, just abnormal ones. When this happens the dog will usually die, often quite suddenly.

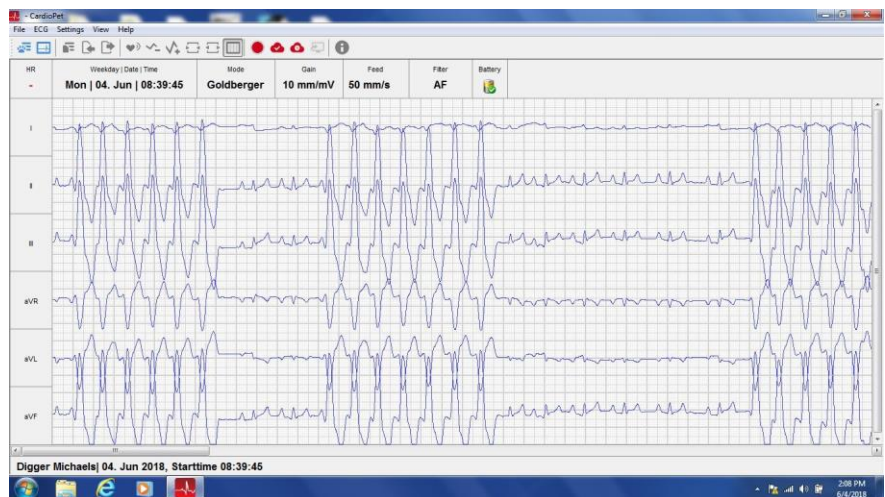
Recommendation: There is a genetic test available for this disease, which should be performed once, preferably at an early age, unless both parent dogs have already been tested and found negative. If a boxer has this genetic disease it should be monitored carefully for the first abnormal beats to appear on an ECG screen. This means an ECG screen at least annually, preferably using a Holter monitor, which performs a continuous ECG over a 24 hour period. For the longest life expectancy, heart medication should be started as soon as any abnormal heart rhythm is seen.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem that can occur separately from ARVC or along with it. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms.

ProBNP blood testing to



detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: **Annual thyroid blood level after age 7**, sooner if symptoms develop.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a **complete blood count**. **Blood testing at least twice a year after age 5** may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Videos: GDV, What is Breed-Specific Wellness; Seniors – Arthritis, Fatty Acids



BREED RISK RECOMMENDATIONS BULLDOG (AMERICAN, ENGLISH & FRENCH)



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Hemophilia (French bulldogs): There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: DNA test when a pet is young. If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include



swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a **complete blood count**. Blood testing at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Sick Sinus Syndrome: the sinus node is the part of the electrical system of the heart that signals the heart to contract, or beat. If the sinus node isn't working properly, the dog will have a very low heart rate and may faint with exercise or stress. The disease usually becomes a problem in young or middle aged Poms. Mild cases can be treated medically; severe ones require a pacemaker implant. Usually used human pacemakers are refurbished for dogs to reduce the cost.

Recommendation: **ECG screening should be performed at least annually** for susceptible breeds of dogs, and before any anesthetic procedure.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: Bulldogs, What is Breed-Specific Wellness





BREED RISK RECOMMENDATIONS

BULL TERRIER



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Familial Renal Disease: This is a form of inherited kidney disease. It usually starts with protein loss into the urine, and progresses to kidney failure. It begins at anywhere from 1-8 years of age.

Recommendation: Annual urine test for protein.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

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Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Videos: What is Breed-Specific Wellness, Eye Diseases



BREED RISK RECOMMENDATIONS

CAIRN TERRIER



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Diabetes is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

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Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.



Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: DNA test when a pet is young. If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Portosystemic shunt: In this disorder some of the blood supply that should go to the liver goes around it instead, depriving the liver of the blood flow it needs to grow and function. A small, poorly nourished liver cannot remove toxins from the bloodstream properly, leading to the build-up of these toxic waste materials, such as ammonia and bile acids, in the bloodstream. Affected animals have trouble handling drugs and anesthetics, and in severe cases high blood ammonia levels cause neurological signs.

Recommendation: Liver testing before surgery in addition to a standard pre-anesthetic panel.

Videos: What is Breed-Specific Wellness, Eye Diseases, Periodontal Disease



BREED RISK RECOMMENDATIONS

CAVALIER KING CHARLES SPANIEL



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm.

In Cavaliers and English cocker spaniels, DCM usually begins with a heart murmur.

Recommendation: An echocardiogram is recommended once a heart murmur develops. **ProBNP blood testing**, to look at a cardiac enzyme that is a marker for heart disease, is also recommended annually for senior Cavaliers.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

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Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.

Platelet abnormalities: Cavs tend to have unusually large platelets and fewer of them. This is not usually harmful but may be noticed if your pet has a complete blood count test. The problem comes in if your pet develops an autoimmune disease that affects the platelets. Without knowing what is normal for your pet it is difficult to diagnose the disease.

Recommendation: **A complete blood count, or CBC, should be done as a young adult** so we know what is normal for the particular dog.

Videos: What is Breed-Specific Wellness, Eye Diseases, Periodontal Disease



BREED RISK RECOMMENDATIONS

CHESAPEAKE BAY RETRIEVER



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Degenerative myelopathy (DM): This is usually a disease of older dogs wherein the hind legs become progressively weaker. Unfortunately, this disease is poorly understood and so far there is no effective treatment available, although some dogs do better with acupuncture, special diets and canine rehabilitation (physical therapy).

It can be difficult to tell whether hind leg weakness is due to DM or one of the many other diseases, such as hip arthritis or lumbosacral disc disease, that also cause hind limb weakness. If we already know whether a dog has the gene for degenerative myelopathy we are way ahead if symptoms develop.

Recommendation: DNA testing as a puppy or adult dog

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: DNA test when a pet is young. DNA test panels are available to test for both DM and hemophilia. If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 4, sooner if symptoms develop.

Videos: What is Breed-Specific Wellness; Seniors – Hemangiosarcoma, Arthritis, Fatty Acids





BREED RISK RECOMMENDATIONS CHIHUAHUA



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Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Urolithiasis: “Uro” refers to the urologic system, “lithiasis” is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease



BREED RISK RECOMMENDATIONS CHOW CHOW



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: **Annual glaucoma screening** for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Diabetes is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: **Annual blood and urine screening**, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: **Annual thyroid blood level after age 4**, sooner if symptoms develop.

Videos: What is Breed-Specific Wellness; Seniors – Fatty Acids, Arthritis



BREED RISK RECOMMENDATIONS

COCKER SPANIEL



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cocker spaniels have been extremely popular dogs for the past 50 years. As a result they have been somewhat inbred and over bred. They have the longest list of genetic problems of any breed.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: **DNA test when a pet is young.** DNA test panels are available to test for both DM and hemophilia. If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: **Annual glaucoma screening** for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Glomerulonephropathy: GN is an inherited form of kidney disease. It slowly damages the kidneys, so affected dogs suffer kidney failure, often at an early age. Various infections and other illnesses can also lead to GN.

Damaged kidneys leak protein, so the disease is diagnosed by testing for excessive protein in the urine. The earlier the disease is diagnosed, the more we can help your pet. Urine samples should be checked annually for excess protein levels. Special diets help to support kidney function, thereby lengthening & improving life.

Recommendation: **Annual protein/creatinine ratio urine test after age 1.**



Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 8, sooner if symptoms develop.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a complete blood count. Blood testing at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease; Seniors - Eye Diseases





BREED RISK RECOMMENDATIONS COLLIE



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Degenerative myelopathy (DM): This is usually a disease of older dogs wherein the hind legs become progressively weaker. Unfortunately, this disease is poorly understood and so far there is no effective treatment available, although some dogs do better with acupuncture, special diets and canine rehabilitation (physical therapy).

It can be difficult to tell whether hind leg weakness is due to DM or one of the many other diseases, such as hip arthritis or lumbosacral disc disease, that also cause hind limb weakness. If we already know whether a dog has the gene for degenerative myelopathy we are way ahead if symptoms develop.

Recommendation: DNA testing as a puppy or adult dog

Drug Sensitivity: Some breeds of dogs do not do well with certain medications. Herding breeds can inherit a gene called MDR1, that affects how they process about twenty different drugs, some of which are commonly used. These drugs should be avoided in these breeds but we can't know to do that without genetic testing.

Recommendations: MDR1 DNA testing should be done once, early in your dog's life.

Videos: MDR1, GDV, Periodontal Disease; Seniors – Fatty Acids, Arthritis



BREED RISK RECOMMENDATIONS

CORGI



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It can be difficult to tell whether hind leg weakness is due to DM or one of the many other diseases, such as hip arthritis or lumbosacral disc disease, that also cause hind limb weakness. If we already know whether a dog has the gene for degenerative myelopathy we are way ahead if symptoms develop.

Recommendation: DNA testing as a puppy or adult dog

Exercise-induced collapse: This is a disease that, as the name implies, causes an otherwise healthy adult dog to collapse during strenuous exercise. Heat stroke can occur along with it. As many as 20% of dogs of some breeds are carriers for EIC. Other diseases that can cause similar signs are heat stroke itself, low blood sugar, abnormal heart rhythm and seizures. There is no treatment for EIC.

Recommendation: DNA testing as a puppy or adult dog along with DM and hemophilia testing, or if symptoms arise.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: DNA test when a pet is young. DNA test panels are available to test for both DM and hemophilia. If no DNA test has been done a Buccal Bleeding Time can be done at the time of surgery.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease, IVDD





BREED RISK RECOMMENDATIONS

DACHSHUND



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 9, sooner if symptoms develop

Videos: What is Breed-Specific Wellness, IVDD, Periodontal Disease



BREED RISK RECOMMENDATIONS DALMATIAN



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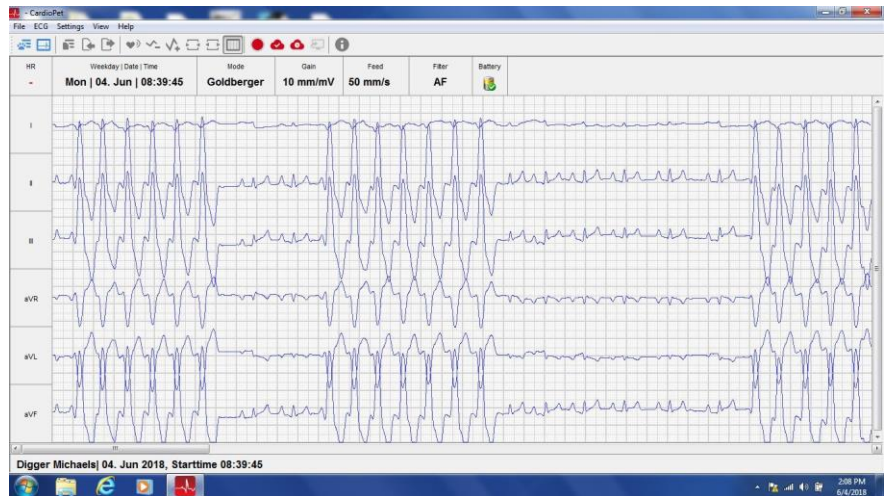
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis.



Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening for seniors. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.



Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The **STT should be done at least once a year once a pet reaches age 7**, sooner if symptoms become apparent.

Urolithiasis: “Uro” refers to the urologic system; “lithiasis” is stone formation. Uroliths are bladder or kidney stones. There are half a dozen different types of stones that can form, and certain breeds of dog are prone to certain types of stones. Dalmatians are prone to urate stones.

Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a male Dalmatian who is possibly unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

A lifelong special diets is recommended for Dalmatians, who are so prone to bladder stones that they should eat Hill's U/D diet or Royal Canin Urate diet unless some other health problem takes precedence.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary. **U/D or Royal Canin urate diet.**

Videos: What is Breed-Specific Wellness; Seniors - Eye Diseases, Arthritis, Hemangiosarcoma



BREED RISK RECOMMENDATIONS DOBERMAN PINSCHER



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention. The Doberman pinscher is prone to several serious and deadly diseases.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

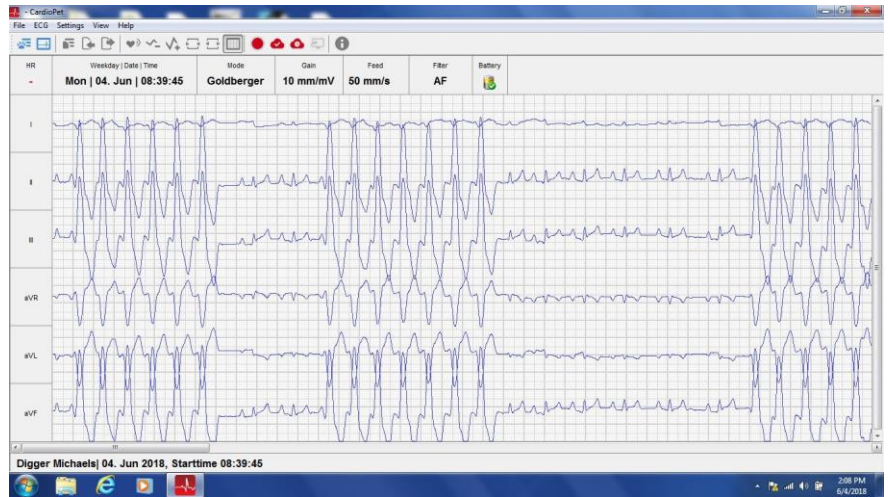
Doberman pinschers are very prone to DCM. Dobermans tend to have a more severe form of it and are most at risk for sudden death. 5% of Dobies die of this disease every year.

Recommendation: Annual ECG screening after age 1 for most affected breeds (to look for abnormal heart rhythms). If abnormalities are detected, an echocardiogram will confirm the diagnosis. Not all dogs will show an abnormal heart rhythm, however, so if your dog is from a breed for which DCM is especially common, including Dobies, an echocardiogram is recommended annually after about age five or six.

Glomerulonephropathy: GN is an inherited form of kidney disease. It slowly damages the kidneys, so affected dogs suffer kidney failure, often at an early age. Various infections and other illnesses can also lead to GN.

Damaged kidneys leak protein, so the disease is diagnosed by testing for excessive protein in the urine. The earlier the disease is diagnosed, the more we can help your pet. Urine samples should be checked annually for excess protein levels. Special diets help to support kidney function, thereby lengthening & improving life. Wheaten terriers are the most commonly affected.

Recommendation: Annual protein/creatinine ratio urine test after age 1.



Hepatitis, or liver disease: Liver problems are more common in certain breeds. Dobermans are prone to chronic, active hepatitis in middle age. It is usually diagnosed with blood testing and liver biopsy, and is treated with medication and special diets. Signs of liver disease do not usually occur until most of the liver is already damaged or destroyed. Early detection and intervention with routine blood screening allows us to detect this problem at an earlier, more treatable stage.

Recommendation: annual chemistry panel blood test

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 4, sooner if symptoms develop

Parvovirus susceptibility: Doberman Pinschers, pit bulls and Rottweilers are more susceptible to this deadly infection than other breeds, and they tend to have a weaker and later response to vaccination.

Recommendation: Parvovirus should also be boosted annually, vs. the every three year schedule we use for other breeds.

Von Willebrand's disease: This is a blood clotting disorder frequently found in Doberman pinschers. 17% are affected and 51% are carriers for the genetic defect that causes it.

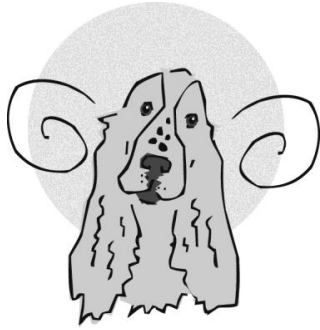
Recommendation: Buccal Bleeding Time to check for abnormal bleeding before any surgery or dental work is done or, ideally, a specific genetic blood test for Von Willebrand's disease prior to surgery.

Videos: GDV & von Willebrand's, GDV



BREED RISK RECOMMENDATIONS

ENGLISH COCKER SPANIEL



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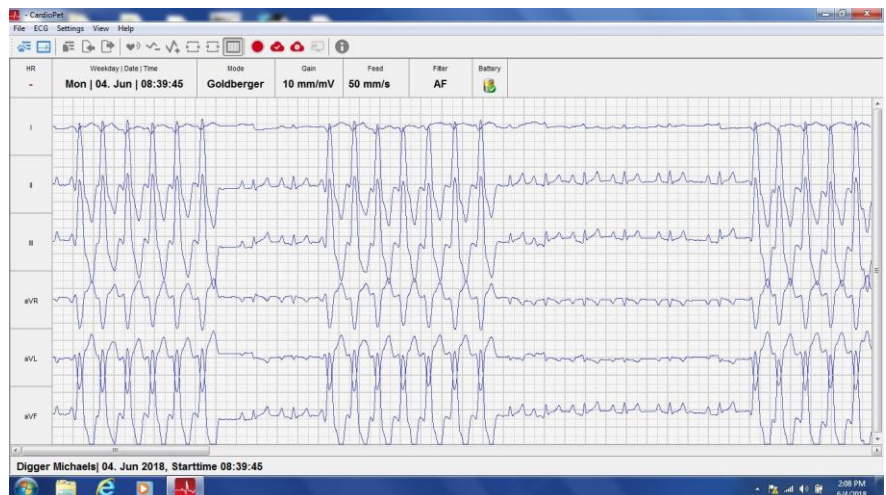
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Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 5, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis.



Familial Renal Disease: This is a form of inherited kidney disease. It usually starts with protein loss into the urine, and progresses to kidney failure. It begins at anywhere from 6 mo. to 2 years of age.

Recommendation: Annual urine test for protein.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness. **Recommendation:** Annual glaucoma screening for seniors. The test we perform is called an



intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 8, sooner if symptoms develop

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 8, sooner if symptoms become apparent.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with a complete blood count. Blood testing at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease, Eye Diseases, Fatty Acids



BREED RISK RECOMMENDATIONS ENGLISH SETTER



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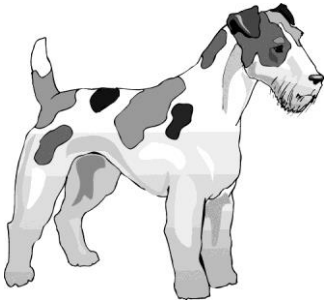
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Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, that occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), **diagnostic testing for clotting time is recommended before surgery is performed.**

Videos: What is Breed-Specific Wellness, GDV, Fatty Acids, Arthritis





BREED RISK RECOMMENDATIONS FOX TERRIER



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Recommendation: Annual glaucoma screening after age 9. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Insulinoma: This is a tumor of the pancreas, specifically the cells that make insulin. Insulinomas produce too much insulin, which leads to low blood sugar levels. The low blood sugar then can cause weakness, collapse, seizures or fainting.

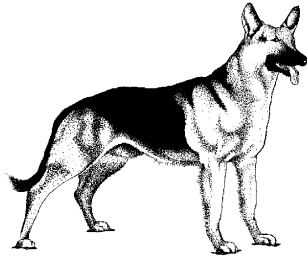
Recommendation: Know what to watch for, annual wellness blood testing after age 9.

Videos: What is Breed-Specific Wellness, Eye Diseases, Periodontal Disease



BREED RISK RECOMMENDATIONS

GERMAN SHEPHERD



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Degenerative myelopathy (DM): This is usually a disease of older dogs wherein the hind legs become progressively weaker. Unfortunately, this disease is poorly understood and so far there is no effective treatment available, although some dogs do better with acupuncture, special diets and canine rehabilitation (physical therapy).

It can be difficult to tell whether hind leg weakness is due to DM or one of the many other diseases, such as hip arthritis or lumbosacral disc disease, that also cause hind limb weakness. If we already know whether a dog has the gene for degenerative myelopathy we are way ahead if symptoms develop.

Recommendation: DNA testing as a puppy or adult dog

Hemangioma and hemangiosarcoma: These are two of the more common tumors of older large breed dogs. The hemangioma is the non-cancerous form, about 30% of cases, and hemangiosarcoma is the cancerous kind. They are tumors that arise from blood vessels and usually occur in organs with lots of blood supply – the spleen is especially common, and the liver, kidneys, heart or skin may be other sites. These tumors fill with blood and then will break open and bleed. Since they usually occur internally, you cannot see the bleeding from the outside. You will see a dog that becomes pale & weak over a 6-24 hour period of time. He may become unable to walk or get up, and breathing may become labored. You can also see a large or distended abdomen if the tumor is large – and some can be volleyball size or larger before the dog becomes ill.

Recommendation: We often find clues that one of these tumors is present on senior wellness testing, so have your senior dog's blood tested at least annually. Know what to watch for and seek help if signs appear.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), **diagnostic testing for clotting time is recommended before surgery is performed.**

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.



Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.

Recommendation: The **STT should be done at least once a year once a pet reaches age 7**, sooner if symptoms become apparent.



Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with blood testing. **A complete blood count at least twice a year after age 5** may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Videos: GDV, What is Breed-Specific Wellness; Seniors – Arthritis, Hemangiosarcoma



BREED RISK RECOMMENDATIONS GOLDEN RETRIEVER



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Exercise-induced collapse: This is a disease that, as the name implies, causes an otherwise healthy adult dog to collapse during strenuous exercise. Heat stroke can occur along with it. As many as 20% of dogs of some breeds are carriers for EIC. Other diseases that can cause similar signs are heat stroke itself, low blood sugar, abnormal heart rhythm and seizures. There is no treatment for EIC.

Recommendation: A **genetic test** is available and should be done for all puppies and breeding dogs of susceptible breeds or when symptoms occur.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: **Annual thyroid blood level after age 7**, sooner if symptoms develop

Hemangioma and hemangiosarcoma: These are two of the more common tumors of older large breed dogs. The hemangioma is the non-cancerous form, about 30% of cases, and hemangiosarcoma is the cancerous kind. They are tumors that arise from blood vessels and usually occur in organs with lots of blood supply – the spleen is especially common, and the liver, kidneys, heart or skin may be other sites. These tumors fill with blood and then will break open and bleed. Since they usually occur internally, you cannot see the bleeding from the outside. You will see a dog that becomes pale & weak over a 6-24 hour period of time. He may become unable to walk or get up, and breathing may become labored. You can also see a large or distended abdomen if the tumor is large – and some can be volleyball size or larger before the dog becomes ill.

Recommendation: We often find clues that one of these tumors is present on senior wellness testing, so have your **senior dog's blood tested at least annually**. Know what to watch for and seek help if signs appear.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs and golden retrievers are especially prone to it. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver,



intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with blood testing. **A complete blood count at least twice a year after age 5** may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: **Chemistry panel by 6-12 months of age**

Videos: What is Breed-Specific Wellness; Seniors – Arthritis, Hemangiosarcoma



BREED RISK RECOMMENDATIONS GREAT DANE



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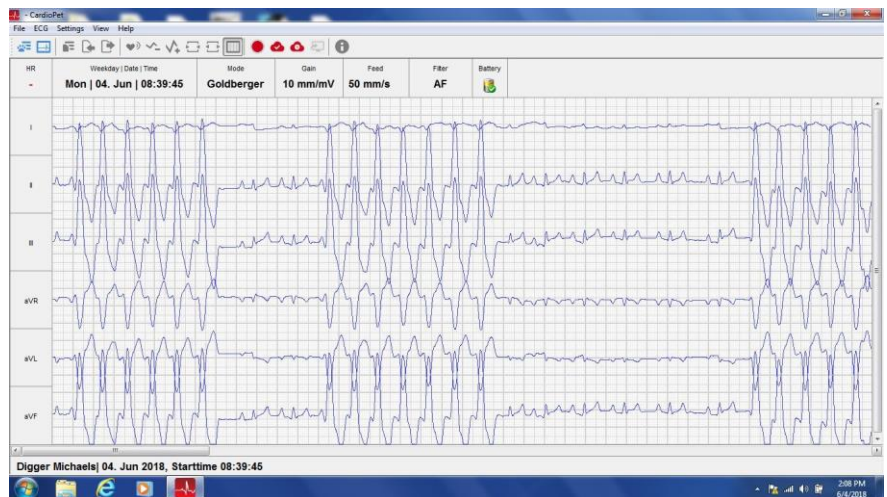
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 6, sooner if symptoms develop

Videos: GDV, What is Breed-Specific Wellness; Seniors – Arthritis, Hemangiosarcoma





BREED RISK RECOMMENDATIONS GREATER SWISS MOUNTAIN DOG



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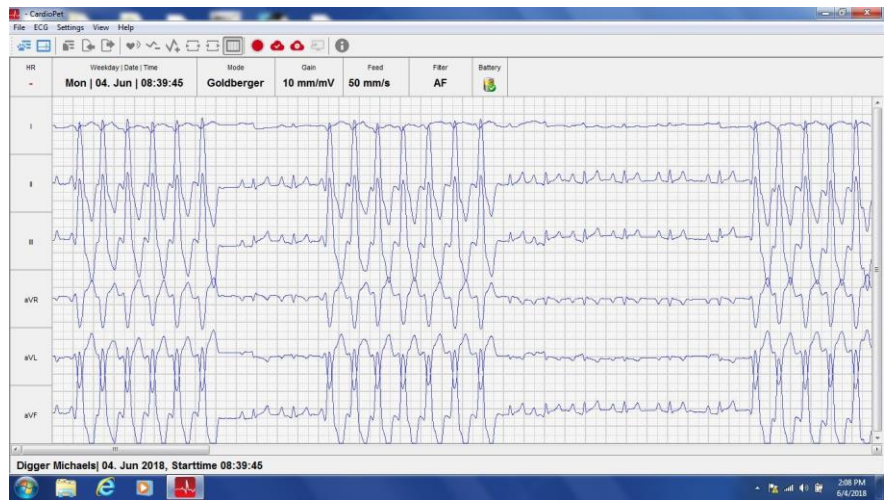
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Recommendation: Annual thyroid blood level after age 6, sooner if symptoms develop

Videos: What is Breed-Specific Wellness, GDV; Seniors – Arthritis, Hemangiosarcoma, Fatty Acids





BREED RISK RECOMMENDATIONS

GREAT PYRENEES



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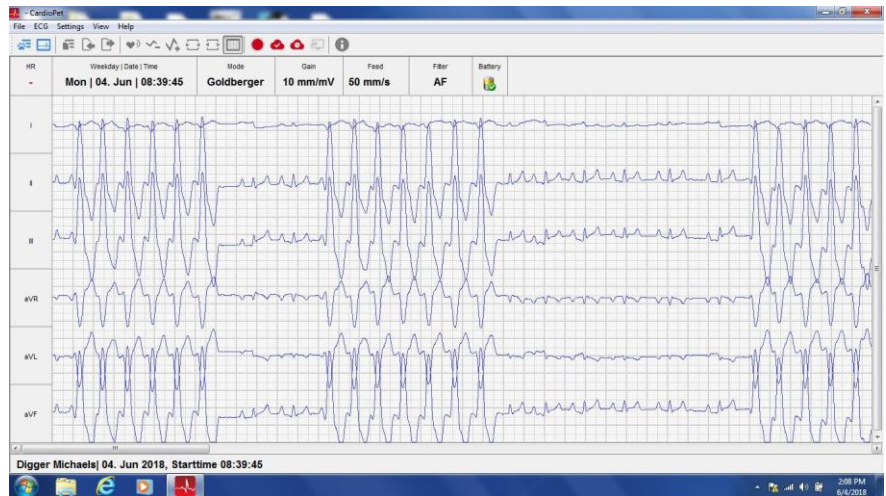
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Videos: What is Breed-Specific Wellness, GDV; Seniors – Arthritis, Hemangiosarcoma, Fatty Acids



BREED RISK RECOMMENDATIONS GREYHOUND



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Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), **diagnostic testing for clotting time is recommended before surgery is performed.**

Hypertension and elevated PCV: Greyhounds have a high proportion of their blood as red blood cells. Normally about 40% of blood consists of cells and the remaining 60% is serum. (Serum is a watery fluid containing electrolytes, proteins, sugar and a chemical mix of hormones, nutrients and other substances.) Greyhounds often have 60% of their blood as red blood cells and only 40% or so as serum. Red blood cells deliver oxygen to tissues such as muscles, so having a lot of them enhances power and speed. It can also have risks, however, because the more RBCs there are the thicker the blood becomes. Hypertension, or high blood pressure, can be a consequence.

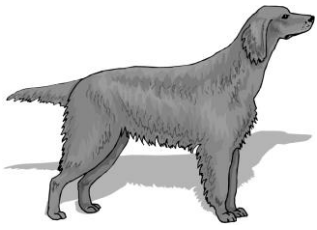
Recommendation: monitor **blood pressure annually**, treat for hypertension if necessary.

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Recommendation: **Annual thyroid blood level after age 6**, sooner if symptoms develop

Videos: What is Breed-Specific Wellness, GDV; Seniors – Arthritis, Fatty Acids





BREED RISK RECOMMENDATIONS **IRISH SETTER, GORDON SETTER**



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Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs and golden retrievers are especially prone to it. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

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Videos: What is Breed-Specific Wellness, GDV; Seniors – Hemangiosarcoma, Arthritis



BREED RISK RECOMMENDATIONS IRISH TERRIER



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Urolithiasis: “Uro” refers to the urologic system, “lithiasis” is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

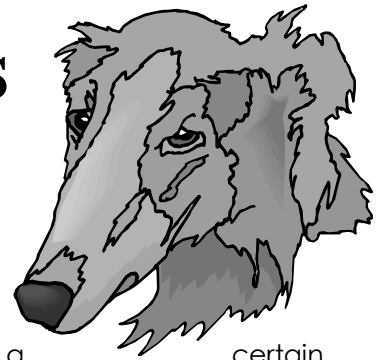
Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease, Fatty Acids



BREED RISK RECOMMENDATIONS

IRISH WOLFHOUND



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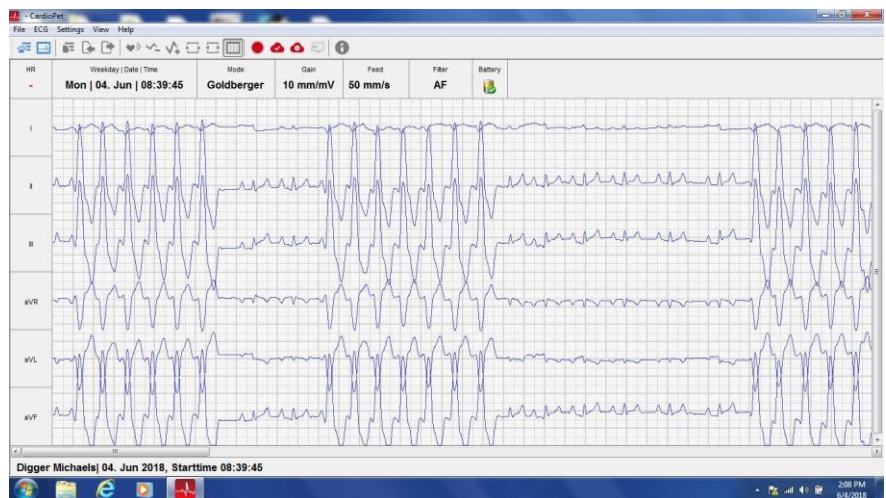
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Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), diagnostic testing for clotting time is recommended before surgery is performed.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 6, sooner if symptoms develop



Portosystemic shunt: In this disorder some of the blood supply that should go to the liver goes around it instead, depriving the liver of the blood flow it needs to grow and function. A small, poorly nourished liver cannot remove toxins from the bloodstream properly, leading to the build-up of these toxic waste materials, such as ammonia and bile acids, in the bloodstream. Affected animals have trouble handling drugs and anesthetics, and in severe cases high blood ammonia levels cause neurological signs.

Recommendation: Liver testing before surgery in addition to a standard pre-anesthetic panel.

Videos: What is Breed-Specific Wellness, Fatty Acids, Arthritis



BREED RISK RECOMMENDATIONS ITALIAN GREYHOUND & WHIPPET



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening after age 8. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Videos: Periodontal Disease, Eye Diseases





BREED RISK RECOMMENDATIONS

JACK RUSSEL TERRIER

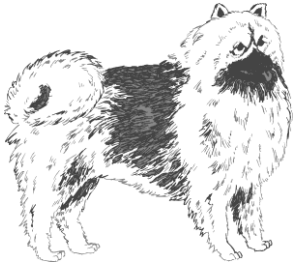


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Videos: Periodontal Disease, Fatty Acids





BREED RISK RECOMMENDATIONS

KEESHOND



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Diabetes: is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

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Videos: What is Breed-Specific Wellness, Eye Diseases



BREED RISK RECOMMENDATIONS

LABRADOR RETRIEVER



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Exercise-induced collapse: This is a disease that, as the name implies, causes an otherwise healthy adult dog to collapse during strenuous exercise. Heat stroke can occur along with it. As many as 20% of dogs of some breeds are carriers for EIC. Other diseases that can cause similar signs are heat stroke itself, low blood sugar, abnormal heart rhythm and seizures. There is no treatment for EIC.

Recommendation: A genetic test is available and should be done for all puppies and breeding dogs of susceptible breeds or when symptoms occur.

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Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

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Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop



Hemangioma and hemangiosarcoma: These are two of the more common tumors of older large breed dogs. They are tumors that arise from blood vessels and usually occur in organs with lots of blood supply – the spleen is especially common, and the liver, kidneys, heart or skin may be other sites. These tumors fill with blood and then will break open and bleed. Since they usually occur internally, you cannot see the bleeding from the outside. You will see a dog that becomes pale & weak over a 6-24 hour period of time. He may become unable to walk or get up, and breathing may become labored. You can also see a large or distended abdomen if the tumor is large – and some can be volleyball size or larger before the dog becomes ill.

Recommendation: We often find clues that one of these tumors is present on senior wellness testing, so have your **senior dog's blood tested at least annually**. Know what to watch for and seek help if signs appear.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs and golden retrievers are especially prone to it. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with blood testing. **A complete blood count at least twice a year after age 5** may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Videos: What is Breed-Specific Wellness, FB ingestion, GDV; Seniors – Arthritis, Hemangiosarcoma



BREED RISK RECOMMENDATIONS

LHASA APSO



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Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: **Chemistry panel by 6-12 months of age**

Urolithiasis: “Uro” refers to the urologic system, “lithiasis” is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: **Urine testing annually** or when signs are present, then surgery and special diets if necessary.

Videos: What is Breed-Specific Wellness, Periodontal Disease; Seniors - Eye Diseases





BREED RISK RECOMMENDATIONS

MALAMUTE



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Diabetes: is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening after age 6. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 6, sooner if symptoms develop

Videos: What is Breed-Specific Wellness; Seniors – Arthritis, Fatty Acids, Hemangiosarcoma



BREED RISK RECOMMENDATIONS MALTESE



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Portosystemic shunt: In this disorder some of the blood supply that should go to the liver goes around it instead, depriving the liver of the blood flow it needs to grow and function. A small, poorly nourished liver cannot remove toxins from the bloodstream properly, leading to the build-up of these toxic waste materials, such as ammonia and bile acids, in the bloodstream. Affected animals have trouble handling drugs and anesthetics, and in severe cases high blood ammonia levels cause neurological signs.

Recommendation: Liver testing in addition to a standard pre-anesthetic and senior screening.

Videos: Periodontal Disease, Dental Home Care; Seniors - Eye Diseases, Fatty Acids





BREED RISK RECOMMENDATIONS MASTIFF



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Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



Videos: What is Breed-Specific Wellness; Seniors - Arthritis



BREED RISK RECOMMENDATIONS

MINIATURE PINSCHER



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Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

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Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.



BREED RISK RECOMMENDATIONS NEWFOUNDLAND



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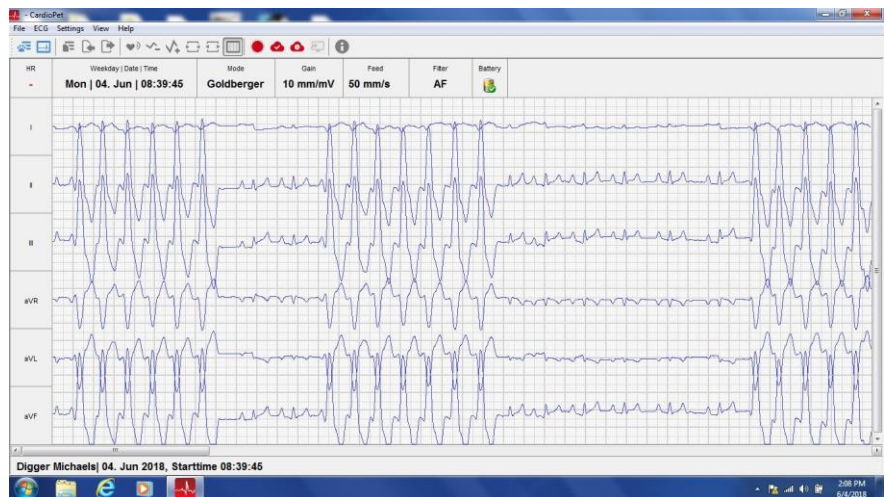
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Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.



BREED RISK RECOMMENDATIONS

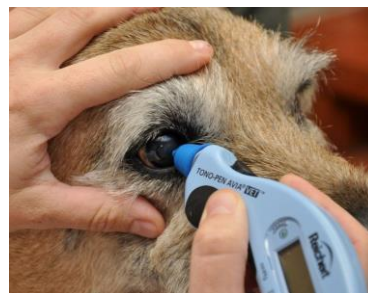
NORWEGIAN ELKHOUND



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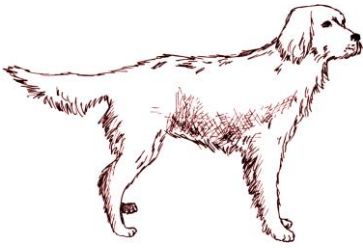


Recommendation: Annual glaucoma screening after age 7. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: Chemistry panel by 6-12 months of age





BREED RISK RECOMMENDATIONS NOVA SCOTIA DUCK TOLLING RETRIEVER



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BREED RISK RECOMMENDATIONS

OLD ENGLISH SHEEPDOG



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Diabetes: is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), diagnostic testing for clotting time is recommended before surgery is performed.

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop



BREED RISK RECOMMENDATIONS PAPILLON



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BREED RISK RECOMMENDATIONS

PEKINGESE



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Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.





BREED RISK RECOMMENDATIONS

PIT BULL TERRIER



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Parvovirus susceptibility: Doberman Pinschers, pit bulls and Rottweilers are more susceptible to this deadly infection than other breeds, and they tend to have a weaker and later response to vaccination.

Recommendation: **Parvovirus should be boosted annually**, vs. the every three year schedule we use for other breeds.





BREED RISK RECOMMENDATIONS ENGLISH & GERMAN POINTERS



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BREED RISK RECOMMENDATIONS

POMERANIAN



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Recommendation: Annual thyroid blood level after age 9, sooner if symptoms develop

Sick Sinus Syndrome: the sinus node is the part of the electrical system of the heart that signals the heart to contract, or beat. If the sinus node isn't working properly, the dog will have a very low heart rate and may faint with exercise or stress. The disease usually becomes a problem in young or middle aged Poms. Mild cases can be treated medically; severe ones require a pacemaker implant. Usually used human pacemakers are refurbished for dogs to reduce the cost.

Recommendation: ECG screening should be performed at least annually for susceptible breeds of dogs, and before any anesthetic procedure.



BREED RISK RECOMMENDATIONS

MINIATURE, TOY AND TEACUP

POODLE



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Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs and golden retrievers are especially prone to it. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with blood testing. A complete blood count at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: Chemistry panel by 6-12 months of age

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.



BREED RISK RECOMMENDATIONS

STANDARD POODLE



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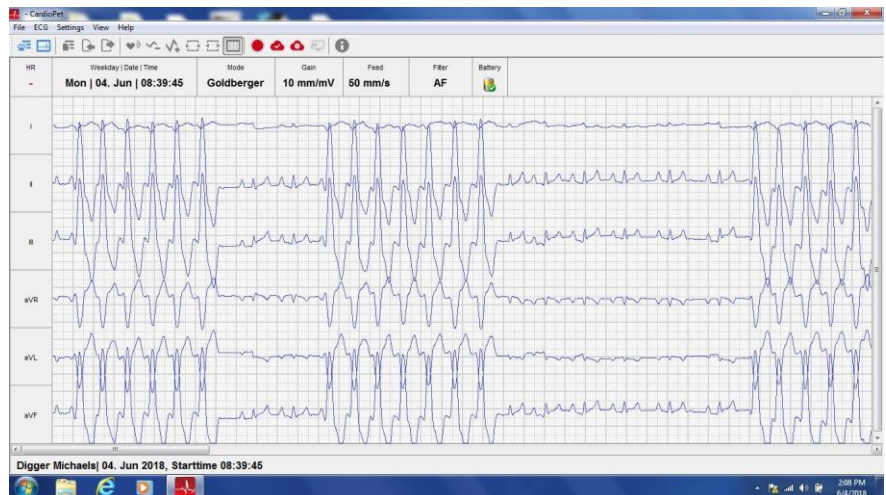
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Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis.



Insulinoma: This is a tumor of the pancreas, specifically the cells that make insulin. Insulinomas produce too much insulin, which leads to low blood sugar levels. The low blood sugar then can cause weakness, collapse, seizures or fainting.

Recommendation: Know what to watch for, **annual wellness blood testing.**

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: **Chemistry panel by 6-12 months of age**





BREED RISK RECOMMENDATIONS PORTUGUESE WATER DOG



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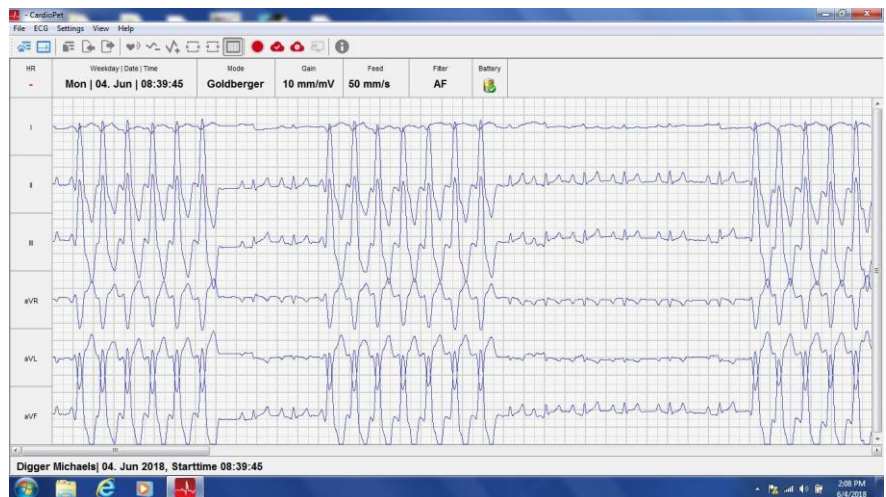
Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Cardiomyopathy: Dilatative Cardiomyopathy, or DCM, is a deadly heart problem. Most people who require heart transplants do so because of this disease, in which the heart becomes larger, thinner & weaker until it can no longer effectively pump blood to the body. Signs may be gradual heart failure or sometimes sudden death from an irregular heart rhythm. Watch for weakness or acting tired; fainting or collapse; labored breathing or coughing.

Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis.





BREED RISK RECOMMENDATIONS PUG



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Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.



BREED RISK RECOMMENDATIONS RAT TERRIER



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BREED RISK RECOMMENDATIONS

RHODESIAN RIDGEBACK



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Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop



BREED RISK RECOMMENDATIONS ROTTWEILER



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Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), **diagnostic testing for clotting time is recommended before surgery is performed.**

Hypothyroidism, or low thyroid function, is common in older dogs of all breeds but some breeds are predisposed to developing this problem much earlier in life. Weight gain, lethargy and skin problems are the most common signs. Temperament or behavior changes can be seen as well. In fact, one study showed that adult dogs that had a shift in behavior, for example becoming more timid or more aggressive, often have hypothyroidism.

Recommendation: **Annual thyroid blood level after age 7**, sooner if symptoms develop

Parvovirus susceptibility: Doberman Pinschers, pit bulls and Rottweilers are more susceptible to this deadly infection than other breeds, and they tend to have a weaker and later response to vaccination.

Recommendation: **Parvovirus should be boosted annually**, vs. the every three year schedule we use for other breeds.





BREED RISK RECOMMENDATIONS ST. BERNARD



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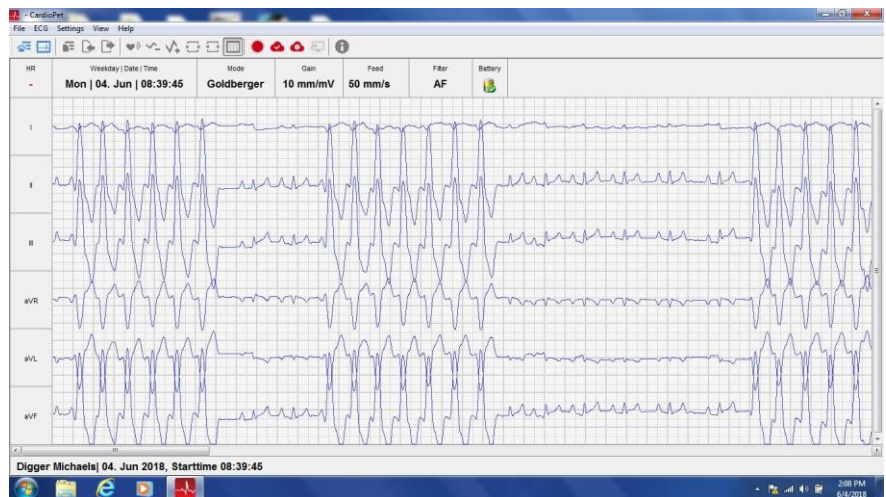
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Recommendations:

Annual ECG screening after age 1, to look for abnormal heart rhythms (picture at right).

ProBNP blood testing to detect heart enlargement is also recommended. If abnormalities are detected, an echocardiogram will confirm the diagnosis. An echocardiogram is recommended annually after about age five or six.

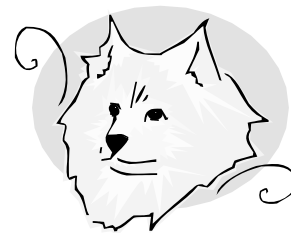


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Recommendation: Annual thyroid blood level after age 6, sooner if symptoms develop



BREED RISK RECOMMENDATIONS SAMOYED



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Diabetes: is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening after age 7. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Glomerulonephropathy: GN is an inherited form of kidney disease. It slowly damages the kidneys, so affected dogs suffer kidney failure, often at an early age. Various infections and other illnesses can also lead to GN.

Damaged kidneys leak protein, so the disease is diagnosed by testing for excessive protein in the urine. The earlier the disease is diagnosed, the more we can help your pet. Urine samples should be checked annually for excess protein levels. Special diets help to support kidney function, thereby lengthening & improving life. Wheaten terriers are the most commonly affected.

Recommendation: Annual protein/creatinine ratio urine test after age 1.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.



Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), **diagnostic testing for clotting time is recommended before surgery is performed.**

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: **Chemistry panel by 6-12 months of age**



BREED RISK RECOMMENDATIONS SCHIPPERKE



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BREED RISK RECOMMENDATIONS

SCHNAUZER



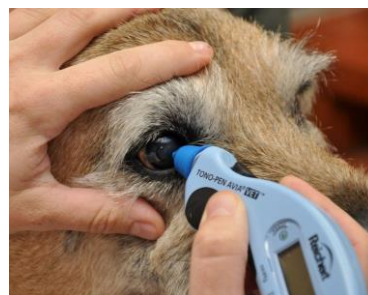
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Recommendation: Annual glaucoma screening after age 9. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Portosystemic shunt: In this disorder some of the blood supply that should go to the liver goes around it instead, depriving the liver of the blood flow it needs to grow and function. A small, poorly nourished



liver cannot remove toxins from the bloodstream properly, leading to the build-up of these toxic waste materials, such as ammonia and bile acids, in the bloodstream. Affected animals have trouble handling drugs and anesthetics, and in severe cases high blood ammonia levels cause neurological signs.

Recommendation: Liver testing in addition to a standard pre-anesthetic and senior screening.

Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: Chemistry panel by 6-12 months of age

Sick Sinus Syndrome: the sinus node is the part of the electrical system of the heart that signals the heart to contract, or beat. If the sinus node isn't working properly, the dog will have a very low heart rate and may faint with exercise or stress. The disease usually becomes a problem in young or middle aged Poms. Mild cases can be treated medically; severe ones require a pacemaker implant. Usually used human pacemakers are refurbished for dogs to reduce the cost.

Recommendation: ECG screening should be performed at least annually for susceptible breeds of dogs, and before any anesthetic procedure.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.



BREED RISK RECOMMENDATIONS

GIANT SCHNAUZER



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Recommendation: Annual thyroid blood level after age 7, sooner if symptoms develop





BREED RISK RECOMMENDATIONS

SCOTTISH TERRIER



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Bladder cancer: Scotties are particularly prone to bladder cancer. This is a type of cancer that cannot be surgically removed and for which chemotherapy is not very effective. The risk is three times higher for dogs whose owners use lawn chemicals on their grass.

Recommendations: Have a urine sample checked every six months when your dog is over eight years of age.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), diagnostic testing for clotting time is recommended before surgery is performed.

Lymphoma, also known as lymphosarcoma, is a common form of cancer in dogs and golden retrievers are especially prone to it. In this disease, the body forms abnormal lymphocytes, which are a type of white blood cell. Because white blood cells can be found throughout the body, this cancer can show up almost anywhere. Symptoms include swollen lymph nodes, an enlarged spleen or liver, intestinal disease, skin nodules, weight loss or fever. Occasionally it shows up in the eyes, brain or spinal cord, the kidneys, the lungs or elsewhere.

Lymphoma is a very treatable form of cancer, with an 80% success rate in dogs receiving chemotherapy. Early diagnosis improves prognosis.

Recommendation: Lymphoma is one of the few types of cancer that can sometimes be found with blood testing. A complete blood count at least twice a year after age 5 may allow an early diagnosis. Watch for swollen glands, panting or labored breathing and weight loss, and call us if any signs appear.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.



BREED RISK RECOMMENDATIONS

SHAR PEI



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Amyloidosis: This is a poorly understood syndrome in which abnormal protein deposits of a particular type of molecule called amyloid damage internal organs. Usually the liver or kidneys are affected, although it can affect other organs as well. (In humans, amyloid deposits in the brain cause Alzheimer's disease.) There is no cure for this problem, although treatment can slow its progress somewhat.

Recommendations: Annual blood and urine screening.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening after age 8. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

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Recommendation: Annual thyroid blood level after age 8, sooner if symptoms develop



Renal dysplasia: This is a genetic form of kidney disease. Affected pets may show kidney failure at an early age. Signs include excessive urine production and water drinking; poor appetite or weight loss; and eventually vomiting and diarrhea. Blood testing and/or urine testing may be used to diagnose kidney disease. An ultrasound of the kidneys will differentiate dysplasia from other forms of kidney disease, such as kidney stones, amyloidosis or antifreeze poisoning.

Recommendation: **Chemistry panel by 6-12 months of age**



BREED RISK RECOMMENDATIONS

SHETLAND SHEEPDOG



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Recommendation: **Annual thyroid blood level after age 9**, sooner if symptoms develop

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.

Recommendation: The **STT should be done at least once a year once a pet reaches age 9**, sooner if symptoms become apparent.





BREED RISK RECOMMENDATIONS SIBERIAN HUSKY



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Recommendation: Annual glaucoma screening after age 7. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hypertension: In dogs, hypertension, or high blood pressure, is usually secondary to kidney disease or Cushing's disease. Huskies can have high blood pressure without an underlying disease problem. High blood pressure can cause blindness and strokes in animals just as in people.

Recommendation: Annual blood pressure testing, blood pressure medication is needed.

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Recommendation: The STT should be done at least once a year once a pet reaches age 7, sooner if symptoms become apparent.





BREED RISK RECOMMENDATIONS

SPRINGER SPANIEL



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Recommendation: Annual glaucoma screening after age 8. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hemangioma and hemangiosarcoma: These are two of the more common tumors of older large breed dogs. They are tumors that arise from blood vessels and usually occur in organs with lots of blood supply – the spleen is especially common, and the liver, kidneys, heart or skin may be other sites. These tumors fill with blood and then will break open and bleed. Since they usually occur internally, you cannot see the bleeding from the outside. You will see a dog that becomes pale & weak over a 6-24 hour period of time. He may become unable to walk or get up, and breathing may become labored. You can also see a large or distended abdomen if the tumor is large – and some can be volleyball size or larger before the dog becomes ill.

Recommendation: We often find clues that one of these tumors is present on senior wellness testing, so have your senior dog's blood tested at least annually. Know what to watch for and seek help if signs appear.

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remainder of the pet's life.

Recommendation: The STT should be done at least once a year once a pet reaches age 8, sooner if symptoms become apparent.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.





BREED RISK RECOMMENDATIONS VIZSLA



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Glaucoma is an extremely painful disease that rapidly leads to blindness. People describe it as feeling as if you are being stabbed in the eye with an ice pick. The eyeball is a tough, rubbery ball containing fluid. The fluid inside the eye is produced by cells within the eye, and this fluid drains back out of the eye via tiny drainage channels. When the fluid cannot drain out as fast as it is being produced it builds up, causing stretching and swelling of the eyeball. The fluid pressure is not only very painful, but it literally crushes the delicate cells lining the retina, quickly leading to blindness.



Recommendation: Annual glaucoma screening after age 7. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.

Hemophilia: There are several types of inherited bleeding disorders, or coagulopathies, which occur in dogs. They range in severity from very mild to very severe. Many times a pet seems normal until a serious injury occurs or surgery is performed, and then severe bleeding can result.

Recommendation: For at risk breeds (or pets with liver disease, because liver disorders can also lead to abnormal blood clotting), diagnostic testing for clotting time is recommended before surgery is performed.





BREED RISK RECOMMENDATIONS

WEIMARANER



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BREED RISK RECOMMENDATIONS WELSH TERRIER



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Recommendation: Annual glaucoma screening after age 8. The test we perform is called an intraocular pressure, or IOP. It is quick and inexpensive, and could save your pet's sight.



BREED RISK RECOMMENDATIONS **WEST HIGHLAND WHITE TERRIER**



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Diabetes is common in some breeds. It usually develops in mid-life, between 3 and 10 years of age. Signs include drinking & urinating much more than normal, and weight loss despite a good appetite. If you notice your dog drinking more water, call us right away. This is one of the most common symptoms of illness in dogs, yet one frequently ignored by pet owners.

Recommendation: Annual blood and urine screening, sooner if symptoms are present. Weight control is very important to prevent and control diabetes.

Hepatitis, or liver disease: Liver problems are more common in certain breeds. Dobermans are prone to chronic, active hepatitis in middle age. It is usually diagnosed with blood testing and liver biopsy, and is treated with medication and special diets. Signs of liver disease do not usually occur until most of the liver is already damaged or destroyed. Early detection and intervention with routine blood screening allows us to detect this problem at an earlier, more treatable stage.

Recommendation: annual blood testing

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.





BREED RISK RECOMMENDATIONS

WHEATEN TERRIER



Many disease problems are genetic or inherited. Certain breeds are at risk for certain diseases. This doesn't mean that just because your dog belongs to a certain breed he will always develop these problems – it just means that he's more at risk than the average dog. It also doesn't mean that these are the only diseases your pet could get – life is not that simple. It does, however, help to guide the medical care your pet needs.

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Glomerulonephropathy: GN is an inherited form of kidney disease. It slowly damages the kidneys, so affected dogs suffer kidney failure, often at an early age. Various infections and other illnesses can also lead to GN.

Damaged kidneys leak protein, so the disease is diagnosed by testing for excessive protein in the urine. The earlier the disease is diagnosed, the more we can help your pet. Urine samples should be checked annually for excess protein levels. Special diets help to support kidney function, thereby lengthening & improving life. Wheaten terriers are the most commonly affected.

Recommendation: Annual protein/creatinine ratio urine test after age 1.



BREED RISK RECOMMENDATIONS

YORSHIRE TERRIER



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Just as some genetically related diseases in humans don't begin to cause problems until later in life – heart disease or breast cancer, for example – many genetic diseases in dogs appear late in life. Some of these can be tested for, enabling earlier diagnosis and intervention.

Hypertension: In dogs, hypertension, or high blood pressure, is usually secondary to kidney disease or Cushing's disease. Yorkies can have high blood pressure without an underlying disease problem. High blood pressure can cause blindness and strokes in animals just as in people.

Recommendation: Annual blood pressure testing, blood pressure medication if needed.

Keratoconjunctivitis sicca, dry eye: also known as KCS, this is a disease in which the tear glands no longer produce enough tears to keep the eye moist. Eye ulcers and infections result. This is a painful condition that can be diagnosed and treated before symptoms appear.

Diagnosis of KCS is simple. A paper strip is tucked under the lower eyelid. Tears soak the strip. After 1 minute we look to see how many millimeters of the strip became wet. This test is called a Schirmer tear test, or STT. A reading under 15 is low. 16-18 is borderline, and above that is normal. Treatment consists of eye ointment that will be necessary for the remainder of the pet's life.



Recommendation: The STT should be done at least once a year once a pet reaches age 9, sooner if symptoms become apparent.

Portosystemic shunt: In this disorder some of the blood supply that should go to the liver goes around it instead, depriving the liver of the blood flow it needs to grow and function. A small, poorly nourished liver cannot remove toxins from the bloodstream properly, leading to the build-up of these toxic waste materials, such as ammonia and bile acids, in the bloodstream. Affected animals have trouble handling drugs and anesthetics, and in severe cases high blood ammonia levels cause neurological signs.

Recommendation: Liver testing in addition to a standard pre-anesthetic and senior screening.

Urolithiasis: "Uro" refers to the urologic system, "lithiasis" is stone formation. Uroliths are bladder or kidney stones. Symptoms of urinary tract stones include blood in the urine, straining to urinate or inability to urinate if the urethra is blocked with stones or crystals. This last symptom is quickly fatal, so a pet, usually male, unable to urinate should be examined immediately. In the early stages, stones may be suspected if blood or crystals are seen in a urine sample test.

Recommendation: Urine testing annually or when signs are present, then surgery and special diets if necessary.

