Every Pet. Every Client. Every Family. Every Time.

BREED PREDISPOSITION TO DISEASE IN GERMAN SHEPHERD CROSSES

We all want quality of life for our pets and one way of assuring this is to be aware of genetic or inherited problems. Certain breeds are at risk for certain diseases. This doesn't mean that all dogs of a certain breed will develop these problems nor does it exclude them from other diseases, however, it does help to tailor your pet's medical needs and preventive health care program.

Many conditions simply require us as pet owners to be aware of the potential. Often simple modifications to diet, exercise and lifestyle can be made to maximize quality of life. Knowing your pets' risk for genetic or inherited diseases and what can be done to prevent or slow the progression of these disorders, can help them live the happiest and healthiest life possible.

PUPPY/ADULT

Dental Health: By 6 months of age your puppy should have all their adult teeth erupted. Any areas of the mouth missing teeth should be x-rayed as they can be stuck below the gum line. If left unerupted, these teeth can encyst and weaken, even fracture the jaw, therefore any unerupted teeth should be removed. Dental x-rays can only be done on an anesthetized pet therefore we recommend doing them at the time of spaying or neutering. Once all the adult teeth are in brushing can start. A healthy mouth will add one to three years of life expectancy for your pet!

Recommendation: Once all the adult teeth are through you can start brushing them. The earlier you start the more accepting your puppy will be. X-ray for any missing teeth.

Digestive disorders: There are several inherited conditions or tendencies that can cause recurrent or chronic vomiting, diarrhea, weight loss or decreased appetite in dogs. These include pancreatitis (inflammation of the pancreas); small intestinal bacterial overgrowth (SIBO) wherein the intestine becomes filled with an overgrowth of "bad" bacteria; food allergy, which is a true allergic reaction to a food substance; food sensitivity, which is an intolerance for certain ingredients but not a true allergic reaction; inflammatory bowel disease (IBD), exocrine pancreatic insufficiency (EPI), wherein the pancreas doesn't make enough of the enzymes that digest food; or malabsorption, wherein the intestines don't absorb food properly. Some of these, start very early in life.

Recommendation: Your job right now is to simply be aware that one or more of these problems is more likely in your breed of dog. To help prevent symptoms, feed a

good quality pet food. Keep your dog's diet consistent. The more things you feed him, the more food items he will have the opportunity to become allergic to. Avoid foods with multiple protein sources. Follow an appropriate deworming schedule. Puppies should have a healthy appetite and be growing at a normal rate, so take advantage of our courtesy monthly social visits for your puppy's first year of life.

Most importantly, avoid snacks and table food high in fat, sodium or artificial ingredients. For example, pig ears contain about 800 fat calories each and are a common trigger for pancreatitis.

Ear infections (otitis): Ear infections are common and painful. Watch for redness in the ear, the accumulation of discharge, scratching or shaking the ear, or pain when the ear is touched or rubbed. Early detection means a more comfortable pet, prevents eardrum damage that can lead to deafness, and ensures a quick return to comfort, so please call if you notice any symptoms.

Recommendation: Have any ear symptoms treated promptly. Use an ear drying solution after your pet has been in the water. If your pet has recurrent ear infections we need to identify any underlying causes and treat for these in order to have success. Underlying allergies are often contributing factors to recurrent ear problems.

Panosteitis: This is a painful inflammation of the long bones in the legs of growing dogs. It usually starts at around 6-10 months of age, and shifts from leg to leg. It is diagnosed on x-rays, and affected dogs will often exhibit pain when the inflamed area is squeezed or palpated. It usually causes no permanent damage but requires pain medication and sometimes rehabilitation if the dog develops an abnormal gait trying to compensate for the sore leg(s).

Recommendation: Have any signs of lameness investigated and diagnosed promptly. Early treatment will help in preventing injury to other limbs as your dog tries to compensate for the pain in affected leg(s)

GDV: Gastric Dilatation and Volvulus, also known as "bloat" usually occurs in dogs with deep, narrow chests. 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 (but no vomit is produced since it cannot get past the twist); 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 of the abdomen behind the ribs on the left side of the body.

Recommendation: If symptoms develop, seek veterinary attention immediately. Prevention includes not letting your dog exercise strenuously after meals, and feed 2-3 smaller meals per day vs. one large one.

A preventative surgery, called a gastropexy, in which the stomach is sutured in place to the abdominal wall so it cannot twist, can be done when a pet is young, such as at the time of spaying or neutering. It can be done laparoscopically.

Hemophilia: There are several types of inherited bleeding disorders 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: Diagnostic testing for clotting time is recommended before surgery is performed.

Hip Dysplasia: Most pet owners have heard of this inherited disease. It causes malformation of the hip joints and subsequent arthritis. Severely affected dogs may be

lame by 6 months of age. Many large and giant breeds of dogs are affected, although good breeding programs have reduced the incidence of this disease significantly. Other related conditions occur in the elbow joint.

Recommendations: Feed a good quality large breed puppy diet. Improper nutrition (nutrient excesses or nutrient deficiencies) can worsen/accelerate the presentation of hip dysplasia. Do not over exercise. X-rays of the hips should be taken when your dog is young to identify the disease early. X-rays can be taken at the time of spaying, neutering or dental cleaning, as good positioning requires that the dog be anesthetized and again at 2 years of age. If detected early the progression of arthritis leading to pain can be greatly reduced by giving Osteosupport, a natural supplement and feeding J/D, a diet that actually interferes with the genes that produce the arthritis! Additionally, an exercise regimen can be suggested so as not to overwork your dog's hips.

OCD: OCD stands for Osteochondrosis Dessicans, and it is a developmental joint disease in which the cartilage within one or more joints doesn't adhere properly to the underlying bone. The resultant flap of loose cartilage causes pain and lameness. Surgery may be required to fix the problem.

OCD is much more common when young large breed dogs grow too rapidly. Joint problems can start to show up when the dog reaches 8-12 months of age. In addition to rapid growth, excessive nutrition, mineral imbalance, and biomechanics all play a role in expression of OCD Puppies that grow too quickly are likely to have problems with OCD. Puppies who gain weight more slowly will still reach the same adult size, it just takes them a little longer to get there.

Recommendations: Weigh your puppy frequently and feed an appropriate amount of food. Special diets are made for large breed puppies, which have fewer calories and slow growth rate appropriately. Do not feed an adult dog food or a calcium supplement. Neither is appropriate for puppies and both can lead to even worse problems. If you observe any evidence of lameness, x-rays are recommended.

RISK	ACTION	DATE CARE NEEDED

Dental Health	Brushing, account for all adult teeth	
Digestive Disorders	High quality large breed food	
Ear Infections	Monitor for discharge, discomfort	
Hemophilia	Test clotting factors prior to surgery	
Panosteitis	Radiograph any lameness	
GDV/Bloat	Preventive surgery with spay/neuter,	
	lifestyle changes	
Hip dysplasia/OCD	High quality large breed diet,	
	appropriate exercise, x-ray hips	

Compassionate – as we tend to your pet's needs.

Committed – to offering the best care for your pet.

Creative – in our use of new technology.

Connected – to our team, to our community and to the leaders in our industry.

Clean – Our hospital will be spotless and odor free.