### Owner's Guide to Caring for an Old German Shepherd

Most Prevalent Health Concerns & Veterinarian Recommendations



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# CARING FOR A SENIOR GERMAN SHEPHERD

We have developed this guide outlining the most prevalent health conditions that German Shepherd dogs experience to help owners respond faster to early symptoms. Early response to symptoms will allow for more effective treatments which can in turn improve outcomes and help dogs live better and longer lives.



# When is a German Shepherd considered "old" or "senior"?

German Shepherds are considered to be "senior" when they are 8 years old or older. This is the age around which we notice the frequency of "old dog" issues increasing. For example, a study has shown that up to 80% of dogs experience arthritis or mobility issues at some point in their lives by the age of 8.

Most German Shepherds live between 8 and 13 years with an average life expectancy of 10-11 years. A veterinary study published in Canine Genetics and Epidemiology followed 12,146 German Shepherds with 272 deaths taking place during the study. The median age at time of death was 10.3 years (Source: "Demography and disorders of German Shepherd Dogs under primary veterinary care").

# MOST PREVALENT DISORDERS WITH GERMAN SHEPHERDS

Different breeds of dogs are affected by different issues and conditions. For example, toy breeds, such as Chihuahuas and Maltese, have high rates of cardiovascular disease, with 19 and 21% of deaths within the breeds, respecbut Golden Retrievers Boxers are known to have high rates of cancer, with 50 and 44% of deaths, respectively (Source: Mortality in North American Dogs). Owners who can anticipate the most common health issues affecting German Shepherds will be able to manage their dogs' wellness better and keep their dogs as healthy as possible.

So what are the main health concerns with German Shepherds as they grow older?

We have identified the following most frequent health issues with old German Shepherds, and assigned a frequency rating for each (very frequent, frequent, somewhat frequent):

### Hip dysplasia (frequent)

German Shepherds have a higher predisposition than many other breeds for hip dysplasia (Source: Kennel Club Prevalence Chart by Breed, and Canine Genetics). Hip dysplasia is a condition where the hip joint becomes partially or completely luxated due to a poor fit of the femoral head in the hip socket. The Orthopedic Foundation for Animals (OFA) estimated that approximately 8.1% of German Shepherds show "moderate to severe" symptoms (Source: OFA database and OFA's German Shepherd Statistics). Hip dysplasia symptoms include waying gait, hind limb lameness, loss of thigh muscle mass, and shoulder muscle enlargement. This in turn can lead to the development of arthritis and pain. Owners of old German Shepherds will be glad to hear that, in many instances, this condition is manageable with treatment options and lifestyle changes that allow for long and healthy lives. However, in more serious cases, surgery might also be recommended.

#### > What to do:

Keep your dog's weight in a healthy range and provide a wholesome diet. Look into physiotherapy and hydrotherapy and encourage fun, appropriate exercises through swimming and building core muscles. The German Shepherd National Breed Club from the American Kennel Association recommends Hip Evaluation & Elbow Evaluation health tests for German Shepherds (Read the Official Breed Club Health Statement). If your German Shepherd starts showing symptoms, your veterinarian will likely take an X-ray to confirm the hip dysplasia diagnosis. In case of mild hip dysplasia or a

surgically unfit dog, your veterinarian may recommend physical therapy, joint supplements, and anti-inflammatory medicines (like NSAIDs). In more severe cases, your veterinarian may recommend a hip replacement or femoral head ostectomy (FHO).

### Spinal conditions (frequent)

German Shepherd dogs are more at risk of several conditions affecting spinal cords, including degenerative myelopathy and lumbosacral disease:

Degenerative myelopathy: Degenerative myelopathy affects the spinal cord which can lead to a progressive paralysis of the hind legs. According to VCA Animal Hospitals, older German Shepherds are more at risk of this condition (Source: VCA on Degenerative Myelopathy). The Orthopedic Foundation for Animals (OFA) estimated that 14.1% of German Shepherds were affected by the condition (Source: OFA's Statistics). Diagnosis is challenging because early symptoms of this disease can be confused with symptoms of arthritis. Dogs experiencing this condition will show weakness in the hind legs, struggle to move or stand up and may start to sway when standing still. The disease will affect mostly older German Shepherds. You can learn more about degenerative myelopathy from this link to vcahospitals.com.

### > What to do:

Unfortunately, the disease is incurable. It is however important to manage the condition: make sure your dog is not

overweight, so closely monitor your old German Shepherd's food intake and exercise routine. Treatments for arthritis or hip dysplasia may also provide some relief from pain.

Lumbosacral disease: According "Breed Predispositions to Disease in Dogs and Cats" by Alex Gough, German Shepherds are also at a higher risk than any other breed for lumbosacral disease. It is a disease of the back and a result of a combination of degeneration of the lumbosacral intervertebral disc. instability of the lumbosacral joint, sacral osteochondrosis, and lumbosacral malformations. It can result in weakness, limping, loss muscle, urinary or fecal incontinence, and in some cases, paralysis. It tends to worsen with age.

### > What to do:

If your German Shepherd is having trouble walking, especially with his hindlegs, your veterinarian will perform an X-ray to investigate abnormalities in the lower spine (lumbosacral area) and pelvis. Sometimes advanced imaging, such as a CT scan, MRI scan or myelogram is needed to further investigate the problem. You should follow the treatment plan from your vet, which might involve pain medication, rest, physiotherapy, or surgery. Ensuring your dog is slim will also help, as lumbosacral disease is aggravated by excessive body weight.

### Ear inflammations (frequent)

Ear inflammations are also frequent with German Shepherds, accounting for approximately 8% of disorders observed with German Shepherds under veterinary care (Source: Canine Genetics and Epidemiology). Ear inflammations can cause redness and swelling in the external ear canal. An inflamed ear will be red and itchy and can be caused by trauma, parasites, bacteria or yeast infection. You might also observe head shaking, odor and pain. In some cases, ear inflammation will resolve itself. In others cases, it can lead to a secondary infection which spreads to the middle or inner ear. Determining the root cause of the inflammation is key for treatment.

#### > What to do:

Your veterinarian will inspect your dog's ear and take a swab to either view under the microscope or culture to determine the cause of the inflammation. Treatment options usually include thoroughly cleaning the ear canal, sometimes under anesthetic in severe cases, and applying prescription ear drops. If ear infections are chronic and there is severe damage to the lining, surgery can be undertaken to alter the ear canal to allow more air in (vertical ear canal ablation - VECA), or close it up entirely (total ear canal ablation - TECA).

### Arthritis (very frequent)

Vet Times published data showing that about 40% of all ages of large dog

breeds such as German Shepherd dogs are affected by arthritis (which is less common in small dog breeds). The condition also becomes more prevalent with older dogs. The earliest symptoms of canine arthritis can be quite subtle and worsen very gradually. As your German Shepherd ages, it is important to be aware of the signs of potential trouble brewing. You will recognize that your German Shepherd is affected by arthritis if your senior friend is reluctant to move, limps, becomes irritable, or if you observe muscle atrophy and behavioral changes. Other, more subtle signs, include being restless, struggling to settle, licking a particular limb or joint more than usual, and panting or yawning more than usual. Arthritis does not have a cure, but good management of the condition can help maintain a high quality of life.

### > What to do:

Carefully manage your dog's weight and give them regular massages to help with the pain and improve blood flow. You can also help with lifestyle changes, or natural therapies and supplements. According to Vet Times, "Evaluation of scientific studies shows existence of moderate-to-good evidence for efficacy of products containing omega-3 polyunsaturated fatty acids, extract of green-lipped mussels and a combination of chondroitin sulphate, glucosamine and manganese in dogs with osteoarthritis" (Source: Treatment and Management of Osteoarthritis in Dogs from Vet Times). Your veterinarian may also prescribe dietary supplements and non-steroidal

anti-inflammatory drugs to decrease inflammation and pain. The best way to approach treating arthritis is in a multi-modal manner, ensuring your dog is lean, gently exercised, receives supplements, and receives pain relief if advised by your veterinarian. Learn more about treatment options for dog arthiritis.

# Skin cysts (somewhat frequent)

Skin cysts are prevalent with all dog breeds, and even more likely to occur with old German Shepherds (Source: Kennel Club Prevalence Chart by Breed). Owners should watch for redness, swelling, pain, discharge, or hair loss which can occur around the cyst area. However, many cysts are not painful. Cysts are also easily treatable and resolved with simple steps.

### > What to do:

The only way to definitively treat a cyst is for your veterinarian to remove it. However, if the cyst is not causing problems, your veterinarian may elect to drain it periodically to keep it small. Topical treatments are also available with varying degrees of success. However, removal of the cyst lining is usually the only way to permanently eliminate it.

# Chronic itching (somewhat frequent)

Older German Shepherds are also more likely than other breeds to be affected by chronic itching (Source: Kennel Club

Prevalence Chart by Breed). Your German Shepherd might be affected by this condition if they scratch and lick part of their skin, rub it against surfaces, or roll on the ground. This condition is easily treatable once the cause of itching is identified.

### > What to do:

Your veterinarian will conduct a thorough physical examination to diagnose chronic itching and may then prescribe topical or systemic antibiotics, steroids (such as prednisolone), and/or immunosuppressive medications (such as cyclosporine) to treat skin infections or allergies.

### Dental tartar (very frequent)

According to the Banfield Pet Hospital Network, as many as 60% of old dogs visiting its network had dental tartar issues (Source: Banfield State of Pet Health). You may observe calcified deposits of hardened plaque that presents as yellow-brown material on the teeth. Tartar affects the majority of dogs, but is not serious on its own. However, it can progress to periodontal disease and cause complications so it is recommended to brush your dog's teeth, as explained below.

#### > What to do:

Regularly brush your dog's teeth with a dog-safe enzymatic toothpaste and use dental sprays and chews to prevent tartar build-up. A veterinarian will conduct a thorough oral examination and might use a hand scaler to remove

any finer particles of tartar from the tooth. An ultrasonic scaling machine might need to be used under anesthetic to remove calcified deposits, and this will also provide an opportunity for decaying teeth to be extracted.

# Nuclear sclerosis (very frequent)

Banfield also reported that approximately 30% of old dogs visiting its network had nuclear sclerosis issues (Source: Banfield State of Pet Health). This condition is the result of aging of the eye lens, resulting in blue-hued, cloudy eyes with a pearly appearance when observed with ambient lighting. It is a normal change associated with aging and is painless.

### > What do do:

Nuclear sclerosis is not a disease, and you don't need to do anything about it. If your dog is going to the medical office, your veterinarian will confirm that your dog indeed has nuclear sclerosis, and not cataracts, by means of a painless and non-invasive ophthalmic examination in which he will examine your dog's eyes and surrounding tissues. No treatment is required in case of nuclear sclerosis, and while it may cause some visual disturbences, it will not make your dog blind.

# Excessive weight (somewhat frequent)

In the past decades, dog obesity has become a growing concern. Abdominal sagging, excessive panting, tiredness, and a reluctance to go for walks are clear signs of obesity with dogs. Obesity worsens other diseases like heart disease, arthritis, diabetes mellitus, blood pressure, and general immunity.

### > What to do:

To ensure safe and healthy weight loss, a veterinarian can calculate the portion size and meal frequency you should be using and recommend the proper foods and treats to use. They may also help you come up with an effective exercise plan for your dog.

# Heart murmurs (somewhat frequent)

Older dogs with heart murmurs will show symptoms including irregular heartbeat, coughing, weakness, lethargy, and fainting. Many old dogs can live with murmurs for years without any treatment, but they should always be investigated for an underlying cause.

#### > What to do:

Make sure your dog is getting plenty of omega-3 fatty acids and amino acids L-Arginine, taurine and carnitine to improve heart health. Veterinarians usually grade heart murmurs on a scale of 1-6. Because there are a number of causes for heart murmurs, your veterinarian will aim to identify the

underlying cause of the heart murmurs and draft a treatment plan accordingly. After properly diagnosing the condition causing heart murmurs, your veterinarian will then likely prescribe medications/treatment for that specific condition.

# Diarrhea and digestive diseases (somewhat frequent)

German Shepherds are a breed which is at an increased risk of developing diarrhea. This may be due to several reasons, of which inflammatory bowel disease (IBD) is the most common. In addition to this, antibiotic-responsive diarrhea and low cobalamin levels are also regularly experienced according to "Breed Predispositions to Disease in Dogs and Cats" by Alex Gough. It has been suggested by two studies by Batt et al. (1991) and Olssen et. al. (2014) that immunodeficiency in the immunoglobulin IgA might result in a susceptibility to infections in the intestinal mucosal walls, which in turn results in diarrheal conditions such as these. Diarrhea results in watery and frequent stools and may be accompanied by fever, lethargy, and vomiting. Prolonged diarrhea can result in serious dehydration which can lead to health complications.

#### > What to do:

A simple bout of diarrhea in an otherwise healthy dog usually clears up quickly after a day of fasting, followed by several days of bland diet. Have your dog fast for 12 to 24 hours with access to water at all times to settle

the upset stomach. When reintroducing food, prioritize bland foods like boiled chicken, white rice, and cooked pumpkin. Keep in mind that German Shepherds are predisposed to recurrent or chronic episodes of diarrhea. If the condition is severe, then visit your veterinarian. You will likely need a stool sample to analyze for parasites and bacteria. Your veterinarian may prescribe anti-diarrheal agents to decrease the intestinal inflammation that is often responsible for diarrhea, and may also change your dog's diet. Dewormers, probiotics, and supplements are also known to help in some cases.

## Gastric dilatation-volvulus (somewhat frequent)

Gastric dilatation-volvulus (GDV) is a life-threatening condition, often associated with large meals that can cause a number of stomach issues. According to "Breed Predispositions to Disease in Dogs and Cats" by Alex Gough, German Shepherds are at an increased risk to GDV at any age, and in one study by Buber et. al. (2007), 28.6% of dogs in the study, which comprised of 112 dogs with GDV, were German Shepherds. This condition is a surgical emergency, where the stomach bloats and twists. This results in the stomach and spleen's blood supply being restricted, as well as prevents food from passing through the stomach.

#### **>** What to do:

GDV is extremely painful, as well as life-threatening, so it is imperative that you take your dog to the

veterinarian immediately if they are displaying symptoms such as bloating, retching without bringing up vomit, stomach pain, a change in the color of the gums, or collapse. Your veterinarian is likely to confirm a GDV diagnosis with an X-ray. Your dog will need emergency surgery to untwist the stomach.



### What do German Shepherds usually die from?

Dog breeds represent genetic islands and as such each breed has a different propensity to die from certain serious conditions ranging from cancers to infections. A study that looked at the cause of death for nearly 4,000 German Shepherds showed that old German Shepherds die most frequently from the following conditions:

# Neoplastic / Cancer (44.7% of classified deaths)

Neoplasms are abnormal growths. These could be benign or malignant (cancerous). Signs of neoplasia in dogs include abdominal swelling, bleeding from the mouth, nose, or other openings, difficulty breathing and eating, or lumps appearing on the skin. These conditions can be either dangerous or nothing to worry about and need the evaluation of your veterinarian as soon as possible if you observe the above symptoms.

#### **>** What to do:

Use food rich in antioxidants to improve your dog's condition and make sure they are getting plenty of omega-3 fatty acids. We recommend visiting the veterinarian as soon as possible to find out if growths are cancerous. Since there are many different types of neoplasia, your veterinarian will base their

diagnosis on medical history, physical examination, and lab tests like radiographs, CT scans, and biopsies to develop a treatment plan. Treatment options can include surgery, radiation therapy, or chemotherapy.

According to "Breed Predispositions to Disease in Dogs and Cats" by Alex Gough, the German Shepherd is at high risk of hemangiosarcoma. Hemangiosarcoma is a cancer of the blood vessel walls, which can cause life threatening bleeding. The most common locations for hemangiosarcoma to develop were the spleen, skin, liver, heart, and lungs. German Shepherds have an odds ratio of 4.7 for developing hemangiosarcoma, compared to other purebred dogs, where an odds ratio over one is an increased risk, and less than one was a decreased risk.

#### **>** What to do:

The symptoms of hemangiosarcoma can

be mild to severe and include lethargy, pale gums, abnormal heart rhythms, abdominal swelling. and collapse. Often, it's difficult to know your dog has a hemangiosarcoma before diagnostic imaging, so your veterinarian might perform blood tests, an ultrasound scan on the abdomen, or X-rays to reach a diagnosis. Depending on the location of the tumor, sometimes they surgically removed. transfusions are also sometimes necessary, as the tumor destroys the blood vessel wall, leading to internal bleeding. Chemotherapy is also often necessary after surgical removal, due to the aggressive nature of the disease.

### Trauma (17.9%)

A dog that has experienced physical trauma or an accident will show signs of injury and may even exhibit behavioral changes. Trauma can be very serious depending on the nature and location of the injury.

#### > What to do:

In the case of an injury, your veterinarian will perform a detailed examination to determine the type and severity of the trauma. Any external injuries will be treated and bandaged, and any fractures will be splinted to prevent further damage or surgically repaired. Your pet may then be observed for 24-48 hours to monitor for internal injuries. Your dog may be given anti-inflammatories to help with pain.

### **Infection (16.5%)**

A dog suffering from an infection will have a fever, digestive upset, and be irritable or lethargic. Depending on the root cause, infections can be serious and potentially fatal if correct treatment is not given.

### > What to do:

You can use a natural antibacterial agent to prevent an infection in an open wound. Your veterinarian will diagnose the probable cause of the infection and prescribe medication accordingly. In case of zoonotic infections that can pass from pet to owners, treatment will begin as soon as possible, and precautions will be taken to prevent transfer.

### Metabolic (4.4%)

Metabolic diseases such as Cushing's disease can be quite serious and cause chronic suffering, so rapid diagnosis is important.

#### > What to do:

Take your dog to the vet for an accurate diagnosis and treat accordingly. Also, make sure your dog is getting a properly balanced diet. If your veterinarian suspects a metabolic disorder, they will conduct a complete physical examination and run multiple lab tests to diagnose the exact metabolic disease or disorder. Once an accurate diagnosis has been reached, your veterinarian will formulate a treatment plan and begin treatment accordingly.

# RECOMMENDATIONS TO CARE FOR YOUR OLD GERMAN SHEPHERD

As your German Shepherd dog gets closer to their senior years (8 years old and older), we recommend the following:

- Monitor for changes in skin condition or mobility. Since old German Shepherds are more likely than other breeds to experience common issues such as chronic itching, cysts, or lumps, we recommend monitoring your dog's skin regularly. Also monitor your dog's food and water intake. Many diseases start with subtle changes in skin condition or changes in how much your dog eats or drinks. Since old German Shepherds are also more likely to experience mobility issues due to hip dysplasia, arthritis or spine conditions, owners should also pay close attention to any challenges experienced by their German Shepherds when trying to stand up, walk or run. Being able to detect changes will allow action to be taken faster, resulting in more effective treatments.
- **Perform a hip evaluation health test.** Since German Shepherds have a higher predisposition for hip dysplasia, it is important to monitor their hip health. If your German Shepherd starts showing symptoms, your veterinarian will likely take an X-ray to confirm the hip dysplasia diagnosis.
- Consider using supplements for joint mobility / arthritis. Since old German Shepherds are more prone to suffer from arthritis than other breeds, it's a good idea to start giving your dogs supplements before problems occur. Studies show that up to 80% of older dogs experience arthritis or mobility issues in their lives. Starting joint supplements before symptoms appear can have big benefits for your German Shepherd later. Owners should also learn to recognize early symptoms: the earlier your dog's arthritis is diagnosed, the better because because the right treatment early on can help slow the progression of the disease and increase the number of 'golden years' your old German Shepherd can enjoy. Make sure you talk to your veterinarian before giving your dog supplements.
- health now, but getting an idea of their baseline health can prove very useful for managing conditions as they age. Indeed, this is a recommendation that is true for all breeds. Take your dog to your veterinarian so they can perform a full clinical exam and blood work. Many blood markers can be assessed including liver and kidney values, protein levels and thyroid hormone to name a few. Establishing this baseline profile now can help detect early signs of disease but also provides a reference point for comparison as your dog gets older. This will allow early treatment and a better prognosis. A yearly blood test for healthy dogs over the age of 8 is recommended, to ensure that any conditions are picked up early.

# **RESEARCH & STUDIES**

#### REFERENCED IN THIS GUIDE

We have used many different studies and sources to identify the most prevalent health issues with German Shepherds, including the following:

- A study on the disorders of German Shepherd Dogs under primary veterinary care (Link), with data on over 12,000 German Shepherds.
- A large-scale survey performed by the American Kennel Club to estimate the prevalence of disorders in different breeds. The study included 1410 German Shepherds (Link).
- A study on the prevalence of disorders in dogs attending primary-care veterinary practices (Link), with a sample size of 3800 dogs including 120 German Shepherds
- A 20-year study on age, size, and breed-related causes of death (Link), including over 3,800 German Shepherds.
- A study by Banfield's Pet Hospitals: Banfield State of Pet Health that captured data from over 2.5 million dogs visiting their pet hospitals.
- The book Breed Predispositions to Disease in Dogs and Cats, 3rd Edition, by Alex Gough, Alison Thomas, Dan O'Neill.

Important disclaimer: All content in this document is for general information purposes only, and is not intended to be a substitute for professional medical advice. You should always consult with your veterinarian before making any health care decision for your dog.

