

Senior Dog Care Guidelines

At what age are our dogs considered "seniors"? It might be younger than you think! The 2019 AAHA Canine Life Stage Guidelines define senior as "the last 25% of estimated lifespan". This means there is no uniform cut-off for all dogs, but an approximation is:

Dog size	Age considered senior
Small (1-20 lbs)	8-10 years
Medium (20-50 lbs)	7-9 years
Large (50-90 lbs)	5-7 years
Giant (>90 lbs)	5-6 years

There are many additional considerations for managing a senior pet. This age group is more likely to develop diseases, including anything from arthritis to cancer. They have slightly lower energy needs, and become prone to obesity. They may develop quality of life concerns, and our goals for their care may change.

Early detection and management of senior conditions is extremely important, because many conditions are not able to be cured but can be slowed down and managed to maintain their quality of life. Some examples include:

- Early dietary management to prevent obesity can extend average life expectancy anywhere from 6 months to 2½ years.
- Arthritis leads to loss of cartilage which cannot grow back, and can cause loss of muscle which is hard to regain for senior pets. Early management is key.
- Chronic kidney disease is not curable, but dogs who have early diagnosis and management can live 3 times as long after diagnosis compared to dogs without any intervention.

In this informational handout we will review common senior conditions, monitoring your dog at home, preventative medical recommendations, and when hospice or end-of-life care may be appropriate.

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Common Senior Dog Conditions



Canine Cognitive Dysfunction (CCD)

Canine cognitive dysfunction is a condition similar to senility or Alzheimer's in humans. It is a disease that causes cognitive (mental) decline and leads to decreased memory, awareness, and function. Between 14-35% of all dogs will develop some degree of cognitive dysfunction, most commonly over the age of 7-9 years old.

Signs of CCD in dogs can be subtle and hard to recognize at first, and they can be confused with- or worsened by- vision and hearing loss. Signs include: increased anxiety, restlessness, aimless pacing, staring, inappropriate urination or defecation in the house, lethargy, decreased interest in play or other activities, decreased responsiveness to the owner and other pets, and abnormal sleep patterns. One of the most common changes we hear about is a dog that has started to not sleep well through the night, or that they wake up often and are anxious or confused.

If these changes are noted at home, it is important to check in with a veterinarian. Other diseases like a brain tumor or arthritis could cause similar signs. Medical conditions must be ruled out or managed before a diagnosis of CCD.

Unfortunately, there is no cure for CCD and it is expected to worsen over time. However, there are many options available to help manage this condition and slow down the progression. That is why early recognition and management are crucial.

Therapeutic options for CCD include:

- Starting a diet high in antioxidants and essential fatty acids
- Selegiline, a medication that is FDA-approved for CCD
- SAM-e supplement
- Anxiety management, including anxiety medications
- Environmental enrichment including exercise, training, puzzles, and play

Each patient and family are different, so specific recommendations may vary between dogs.



Arthritis

Arthritis- more formally referred to as "osteoarthritis" or "degenerative joint disease"- is a condition that involves degradation of joints. This includes loss of cartilage which helps lubricate and protect joints, decreased production of joint fluid, and development of spurs and growths on the associated bones; all of which ultimately leads to painful and inflamed joints.

There are multiple factors that lead to arthritis. They include:

- Injury to the surrounding tendons, soft tissue, and bones
- Obesity, which causes extra strain on joints
- Poor joint conformation such as hip and elbow dysplasia, which some breeds are predisposed to and born with
- Age related degeneration

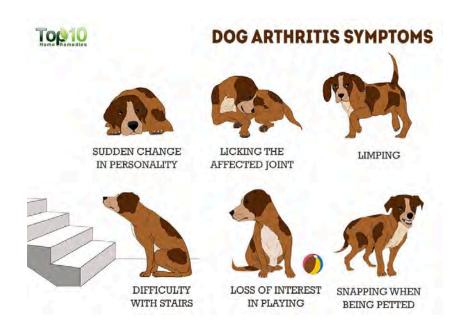


Arthritis is an irreversible disease. It cannot be cured and we cannot reverse the loss of cartilage and other factors in the joints. On top of that, early changes make further degradation more likely in a "snowball effect". Early signs can be subtle, which is why it's important to monitor your senior dogs carefully and bring up any possible changes or concerns with your veterinarian. Signs include:

- Stiffness
- Being slow to get up
- Decreased activity
- Trouble jumping up and down
- Being reluctant to jump or use stairs
- Walking up and down stairs differently
- Not wanting to walk as long
- Falling, stumbling, and weakness
- Limping or holding legs up
- Muscle loss (tends to make them look "bony")
- In extreme cases, reacting to touching certain areas

Since it is not a curable disease, treatment focuses on managing pain and inflammation and maintaining remaining joint health. There are a wide range of treatment options available, and the best plan will vary between patients and families and may include multiple treatments. Options include:

- Anti-inflammatory medication (often NSAIDs)
- Chronic neurologic pain medication such as gabapentin and amantadine
- Nerve pain injections such as Librela
- Laser therapy on affected joints
- Acupuncture therapy
- Weight loss
- Low-impact exercise such as swimming or water treadmills
- Injections to promote joint lubrication such as Adequan
- In advanced cases, steroid or radiation injections in the joint



Dental Disease

Over 80% of dogs will have some degree of dental disease by age three, so this is not a unique issue to senior dogs. However, the older a dog gets, the longer there is for dental disease to form or worsen. This is especially true if they do not receive routine at-home dental preventative care and regular anesthetized dental cleanings.

Even though dental disease is not unique to our senior patients, it is important to emphasize as a disease we can prevent and manage because it can significantly impact their quality of life.

Every dog should have at-home preventative dental care daily. The best prevention is brushing their teeth, either with a finger toothbrush or small tooth brush and enzymatic dog-safe toothpaste. If your dog cannot be acclimated to tooth brushing, other options include dental chews, dental treats, dental diets, and dental powder additives for water. We recommend products that have been studied and approved by the "Veterinary Oral Health Council (VOHC)", all of which have a label:



Ideally, dogs should also have regular dental examinations and cleanings under anesthesia throughout their life. The VOHC recommends up to once a year. Depending on your dog's oral health and other conditions this may be recommended more or less frequently.

Dental care and cleaning recommendations extend to our senior patients. Senior dogs should be screened more thoroughly for disease prior to anesthesia and may require adjustments to their anesthetic plan, but age by itself is not a reason to avoid anesthesia. Good oral health helps keep our senior dogs comfortable and eating, and limits dental-related complications later in life. Refer to the "Periodontal Disease" handout for more detailed information on dental disease in dogs.



Urinary or Fecal Accidents

This is a broad description for when a dog starts to urinate or defecate inappropriately. There are many different reasons why dogs may start to do this in old age.

The first possibility is true incontinence. Incontinence is defined as "lack of voluntary control over urination and/or defecation". Incontinence tends to look like: dropping feces or dribbling urine without being aware (such as when they're walking or resting) and leaking urine or emptying their bladder when sleeping.

Incontinence sometimes occurs from a nerve change that prevents dogs from physically being able to hold their bladder or bowels. In female dogs, it can also be associated with hormonal changes.

Other times, dogs may not be incontinent but have other changes including:

- Going to the bathroom more frequently
- Defecating/urinating in inappropriate places, like inside the house
- Straining
- Trying to posture (get in position) but are unable to

These instances can all happen for many different medical reasons. Some examples include a dog who has developed diabetes and needs to pee more frequently, or a dog who has arthritis and has trouble squatting to poop. Accidents can also happen due to cognitive changes and confusion.

Due to the large variety of reasons your senior dog may have urinary or fecal accidents, it is important to discuss it with your veterinarian who will collect a detailed history, perform an exam, and may screen for diseases with blood and urine tests.



Metabolic and Endocrine Diseases

There are a wide range of diseases that dogs of any age can develop, but senior dogs become more prone to them the older they become. There are too many potential diseases to cover comprehensively, but included here are short descriptions of some more common metabolic diseases.

- Diabetes (Diabetes mellitus): This is a dysfunction of blood sugar regulation leading to very high blood sugar values. Common signs include drinking more, urinating more, and eating a lot but losing weight. If unregulated, this can lead to the life threatening condition "Diabetic Keto-Acidosis (DKA)".
- Cushing's disease (hyperadrenocorticism): This is a disease leading to overproduction of steroid hormones; most commonly the hormone cortisol. It usually involves a growth on the pituitary gland or adrenal glands, which in rare cases can be aggressive. The most common signs are drinking and urinating more, and sometimes hair loss and a pot belly.
- Chronic Kidney Disease (CKD): Also known as "chronic kidney failure". This is gradual
 loss of kidney function (which is to filter waste products in the blood and produce urine).
 Signs include increased drinking and urination, and in later stages weight loss and
 decreased appetite.
- Hypothyroidism: This is when the thyroid gland does not produce as much thyroid hormone, which leads to signs like weight gain, thin haircoat, and lethargy. Most of the time this happens due to an autoimmune process that is easily treated, but there are rare cases of more serious causes like thyroid cancer. Blood testing is needed to differentiate the cause.

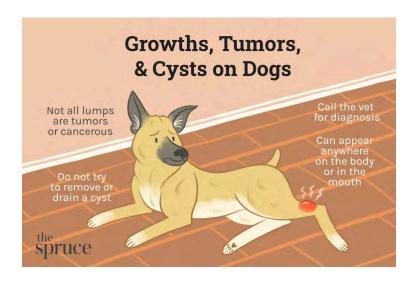
Most metabolic and endocrine diseases are diagnosed with a combination of a history and blood and urine testing. We recommend biannual blood and urine testing on senior dogs to screen for these diseases. If you have concerns about new symptoms in your dog, the best next step is to make an appointment to discuss their history and exam.

Cancer

Cancer is used as a very broad layman's term for any type of abnormal cell growth. The medical term for cancer is "neoplasia" which means "new growth" and is a more accurate description. That is because "cancer" tends to bring bad, scary, and negative things to mind- however, there are many types of cancer. Technically benign cysts and skin tags are a type of cancer (think: abnormal growth), but those do not usually create serious issues.

Older dogs are more prone to cancer of all types, which is just a function of age. Luckily our dogs are living much longer these days due to advances in medical care! However, the longer they live, the more often we will see cancer pop up.

When we talk about cancer, we tend to broadly classify it into "aggressive" and "benign (non-aggressive)". Aggressive cancers are the types that can spread, cause issues, impact health, and shorten lifespan. Some examples include osteosarcoma (a bone cancer) and leukemia (a blood cancer). Benign cancers are the types that may only be a local growth, not prone to spreading, and unlikely to cause serious health issues. Some examples include cysts and adenomas. A lot of cancers may fall in between aggressive and benign.



Many types of cancer are not visible on the outside of your dog as a mass. For example, leukemia is a cancer of the bone marrow that leads to changes in white blood cells. Other types of cancer affect the skin or outside of a dog and can be felt or seen as a mass.

It is important to note that almost no masses can be 100% identified just by looking at them. Usually, a sample is needed to identify the growth. That means that we do not have information on aggressiveness and treatment options until we take a sample of a mass. The two major sampling methods we have are:

- 1) **Fine Needle Aspirate**: A needle is directed into the mass to take a very small amount of cells to review with a microscope. This can diagnose SOME types of masses, but not all. Sometimes we get partial information. The benefits to this method is that the dog can usually remain awake, and it is no more painful or invasive than a vaccine needle.
- 2) **Biopsy**: This is when part of the mass or the whole mass is removed, and a large piece of tissue is sent to a pathologist to identify. This is almost always diagnostic, and can give us information on whether the growth is aggressive. However, it usually requires sedation or anesthesia.

Treatment varies between different types of growths and cancers. Some benign cancers can be left alone and monitored, some are cured once the growth is surgically removed, and others are best treated with chemotherapy or radiation. If cancer has been identified in your dog, treatment options should be discussed with a veterinarian.

Senior Medical Recommendations

As you can see, senior dogs can face a variety of changes and new medical conditions. Medical monitoring, check-ins, and preventative care are all extremely important to help catch conditions early and manage them well. Following AAHA guidelines, our recommendations for senior dogs are as follows:

- Examination and consultation every 6 months
- Full lab work every 6 months including:
 - o Complete Blood Count
 - Chemistry
 - Urinalysis
- Additional blood tests every 6-12 months including:
 - o NT-proBNP, a heart enzyme
 - Thyroid hormone
- A fecal test every 12 months
- A heartworm and tick borne disease screen every 12 months
- A blood pressure screening every 12 months

This is a guideline for a healthy senior dog and does not fit every patient. This plan may change depending on other health conditions that need to be monitored, or the needs and temperament of individual patients or their families.



End-Of-Life Care

This section discusses terminal illness, pet death, and euthanasia.

Quality of Life

Everyone's goal for their senior dog is for them to have a good quality of life. What happens when we no longer feel like they have that?

To understand this question, let us first understand "quality of life" (QOL). This is a very broad term used to suggest a pet's (or person's) happiness and comfort. It also suggests that a pet is free from any suffering, which includes things such as nausea, uncontrolled pain, inability to maintain hygiene, and extreme anxiety or fear.

There is not one single definition for what this looks like for every dog. Common signs we look for are wanting to eat, maintaining weight, comfort and lack of pain, maintaining hygiene, and overall happiness. Other signs can be individual to each dog. For example, a dog who loves to play fetch every day continues to want to play.

As a dog gets older, they usually start to lose signs of quality of life. Their arthritis may prevent them from running around the yard, or they may start to get confused and disoriented. They may develop a condition that makes them nauseous and not eat, or start to have trouble with their mobility and get urine and feces on themselves. At some point, a senior dog will no longer have a good quality of life.

There is no definitive cut off to define when a dog loses their QOL. You may or may not be able to decide by yourself when this time is. Your veterinarian can be consulted to discuss and help assess your pet's QOL.

There are also some guided handouts to help assess quality of life in the back pocket of this book.

Once you determine your pet does not have a good quality of life, what happens next?

There are three main options that should be considered.

- 1. If steps can be taken to treat your pet and improve QOL
- 2. Consider hospice care (also called palliative care) to treat symptoms
- 3. Consider humane euthanasia to relieve them of suffering

Treatment

Treatment depends on the individual pet and their problems. This should be discussed with your veterinarian so you can make a plan together. Testing may be performed to see if a diagnosis can be reached or if there is specific treatment or even a cure available. For example, your pet may have enlarged lymph nodes diagnosed as a type of cancer that can receive chemotherapy treatment.

Hospice (Palliative) Care

Generally with hospice care, the goal is NOT to pursue specific treatment or cure of a disease. Instead, the goal is to maintain the quality of life and comfort of your pet, and to relieve them from suffering. For example, if your pet is diagnosed with cancer, hospice care can include managing any associated pain and nausea. Hospice care is generally in anticipation of a natural death or euthanasia, but can have different expected timelines ranging from months to days.

Just like with any medical plan, a hospice care plan should be made with your veterinarian and tailored to both your pet and your family's needs.

Euthanasia

Euthanasia is medically assisted death. The term euthanasia means "a good death". The goal of euthanasia is to relieve a pet from suffering quickly and without pain.

Euthanasia can be performed using several methods, which may vary between situations and veterinarians. In all cases, comfort and painlessness are a priority. Most commonly a medication is first injected that makes the pet comfortable, sedated, and/or unconscious. Then a second medication is injected that slows the heart until it stops, which is when the pet has died.

How this happens, and whether you are present, is a highly personal choice. Some people prefer to stay with their pet until a certain point in the process and then leave. Some people want to hold their pet as they pass, or to have other people present, or to perform a ceremony. Euthanasia can be performed in a vet clinic, or there are services available that perform euthanasia in your home. You can talk to the veterinarian performing the procedure about any personal preferences or practices.

Deciding to euthanize a beloved pet is never easy. If you are struggling with this decision do not hesitate to reach out to your pet's veterinarian to discuss whether euthanasia is the best option for your pet and your family.



Pet Loss and Grief

It can be overwhelming to lose a pet. It can also be overwhelming to think about your aging pet and upcoming end-of-life, which is called "anticipatory grief". If you are struggling with pet loss or anticipated pet loss, consider looking into these resources:

- Association for Pet Loss and Bereavement
- Lap of Love
- The Pet Loss Support page (pet-loss.net)
- Angel's Paws

Sources:

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