

# Thyroid Disease In Dogs



**THYROID DISEASE** is a relatively common problem in dogs. While it is usually treatable, learning that your dog has a thyroid condition is understandably concerning.

Here is some information about the more common thyroid diseases that can affect dogs to help you better understand your dog's condition.

## What Does the Thyroid Do?

In order to understand thyroid disease, it helps to have an understanding of what the thyroid actually does.

The thyroid gland is located in your dog's neck, where it produces the hormone thyroxine (T4), along with several other important thyroid hormones. These hormones play a large role in your dog's metabolism and can cause major problems when they are not produced at normal levels. The thyroid is like the thermostat of the body.

## Hypothyroidism

Hypothyroidism occurs when your dog is not secreting enough of the thyroid hormones, causing your dog's metabolism to slow. This condition is more common in dogs than in other domestic animals, but it usually responds well to appropriate medication.



## **What Causes Hypothyroidism?**

In 95 percent of cases, the direct destruction of the thyroid gland causes hypothyroidism. This destruction is usually the result of either lymphocytic thyroiditis or idiopathic atrophy of the thyroid gland. Other, rarer causes of hypothyroidism include cancer and congenital defects.

## **What Are the Symptoms of Hypothyroidism in Dogs?**

Low thyroid levels affect all your dog's organ systems. The symptoms of hypothyroidism can vary greatly from dog to dog but are all mostly related to your dog's slowing metabolism.



**Here are some of the more common symptoms:**

- Lethargy
- Exercise intolerance
- Mental dullness
- Weight gain without a change in appetite
- Obesity
- Cold intolerance
- Changes in coat and skin, like increased shedding, hair thinning, and hair loss
- Thickening of the skin
- Reproductive disturbances in intact dogs

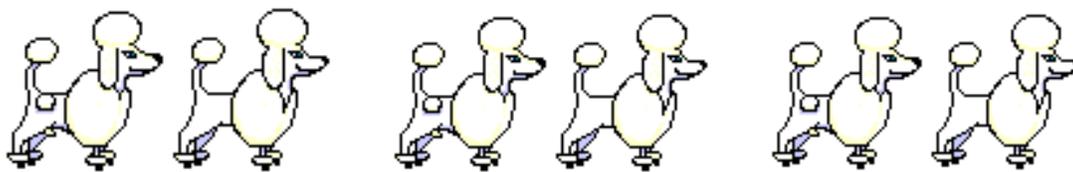
**Some breeds** do appear to be at greater risk of developing hypothyroidism than others. Medium-to-large-size breeds are more likely to develop the disease than toy and miniature breeds, and the Cocker Spaniel, Miniature Schnauzer, Dachshund, Doberman Pinscher, Golden Retriever, Airedale Terrier, and Irish Setter appear to be predisposed to developing the condition.

### **Diagnosing Hypothyroidism in Dogs**

The Merck Veterinary Manual states that hypothyroidism is one of the most over-diagnosed diseases in dogs. This is because many diseases mimic hypothyroidism. Some conditions or clinical signs even improve with thyroid medication. Other diseases also affect the thyroid levels but are not hypothyroidism. This can make diagnosing a thyroid condition tricky, so be patient as you work with your veterinarian to get to the root of your dog's symptoms.

Your veterinarian will diagnose your dog based on clinical signs and careful diagnostic testing. This will probably require several blood tests to determine if your dog exhibits any of the abnormalities commonly associated with the disease, and regular monitoring of your dog's thyroid levels.

One of these tests will probably be a test of your dog's T4 concentration. This is a good initial screening test for hypothyroidism however, your veterinarian may recommend running further tests to get a definitive result.



## Treating Hypothyroidism in Dogs

Hypothyroidism is treatable. Your veterinarian will probably give your dog a prescription for thyroxine, a replacement hormone compound, to offset your dog's low thyroid function.

The dosage will vary depending on your dog's weight and thyroid levels. Your veterinarian may need to adjust your dog's dosage over time, and you should expect to see results after one to two months. Once your veterinarian has determined a stable dose, your dog will most likely need to have his thyroid levels retested once or twice a year and continue the stable dose of medication, for the rest of his life.



## Autoimmune Thyroiditis

Some breeds of dogs are predisposed to a type of thyroid disease called autoimmune thyroiditis. This disease occurs when the immune system attacks the thyroid gland and is more common in the Akita, Doberman Pinscher, Beagle, and Golden Retriever.

Hypothyroidism can be the only manifestation of this disease, but autoimmune thyroiditis can also be a symptom of another disorder, such as systemic lupus erythematosus, or panendocrinopathy. This is one of the reasons why getting an accurate diagnosis for hypothyroidism is so important.



## Hyperthyroidism

Hyperthyroidism occurs when your dog's body produces too much of the thyroid hormone, increasing your dog's metabolic rate to dangerous levels. This disease is rare in dogs and is much more common in cats, but when it does affect dogs, it is usually serious.

A type of cancer, called thyroid carcinoma, is the primary cause of hyperthyroidism in dogs. Once diagnosed, your veterinarian will discuss the treatment options and prognosis for your dog. These options will depend on the stage of the cancer, the size of the tumor, and the extent of nearby tissue involvement.

There are several treatment options available for thyroid carcinoma. Your veterinarian may recommend surgery, chemotherapy, or radiation treatments, depending on your dog's condition. In the meantime, there are medications available to counteract the excess hormone levels to keep your dog comfortable.



**The symptoms of hyperthyroidism in dogs include:**

- Weight loss
- Hyper-excitability
- Increased appetite
- Increased thirst
- Increased urination
- Enlargement of thyroid gland
- Vomiting
- Diarrhea
- Increased amount of stool
- Congestive heart failure
- Tachycardia (fast heart rate)
- Heart murmurs
- Cardiomegaly (enlarged heart)
- Dyspnea (shortness of breath)

Unfortunately, the long-term prognosis for dogs with hyperthyroidism and thyroid carcinoma is poor to grave. Talk with your veterinarian about your dog's condition for the most accurate prognosis.



## **Goiters in Dogs**

Not all thyroid enlargement is necessarily cancerous. In some cases, this enlargement, called a goiter, could be due to another cause entirely.

Goiters can affect all domestic mammals and birds. They can be caused by iodine deficiencies, eating goitrogenic substances (foods or other substances that affect thyroid function), too much iodine in a diet, and inherited defects that affect the synthesis of thyroid hormones.

Luckily, dietary imbalances are rare in dogs fed a commercial diet. Most goiters in dogs are caused by genetic defects, or they develop as a side effect of administration of trimethoprim-sulfa, an antibiotic used to treat a variety of infections in dogs, according to veterinarians.



Goiters can be a symptom of congenital hypothyroidism, and Toy Fox Terriers in particular, appear to be predisposed to congenital hypothyroidism with goiters.

Goiters often appear more alarming than they are. However, any swelling on your dog's neck should be taken seriously. If you suspect your dog has a goiter, or if you find swelling in your dog's neck, contact your veterinarian as soon as possible.

### **What Should I Do If I Think My Dog Has A Thyroid Problem?**

Thyroid disease in dogs requires medical treatment from a veterinarian. Make an appointment with your veterinarian if your dog is showing symptoms of thyroid disease.