

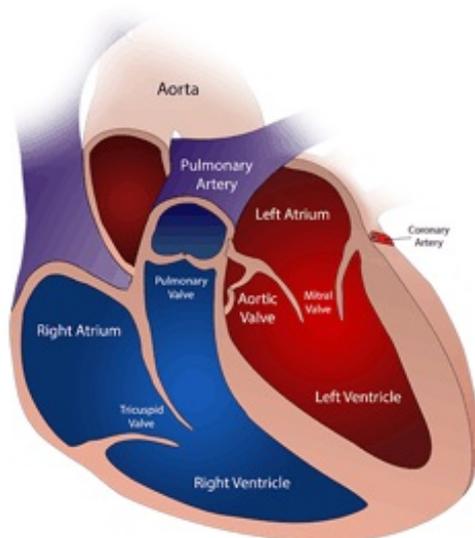
# Congestive Heart Failure in Cats

 [www.cat-world.com.au/congestive-heart-failure-in-cats.html](http://www.cat-world.com.au/congestive-heart-failure-in-cats.html)

[What is congestive heart failure?](#) [Causes](#) [Symptoms](#) [Diagnosis](#) [Treatment](#) [Home care](#)

## At a glance:

- Congestive heart failure is a life-threatening disorder which occurs when the heart doesn't pump blood as efficiently as it should causing fluid to back up in the lungs and abdomen.
- Causes include cardiomyopathy, high blood pressure, heartworms, tumours, heart disorders, acromegaly.
- Symptoms of heart failure include lethargy, shortness of breath, coughing, reluctance to exercise, exercise intolerance.
- Treatment – Address the underlying cause as well as supportive care such as oxygen therapy, diuretics, thoracentesis (removal of fluid) and vasodilators.



## What is congestive heart failure?

Congestive heart failure is a life-threatening disorder which occurs when the heart doesn't pump blood as efficiently as it should. This causes fluid to back up in the lungs and abdomen, while other organs don't receive enough blood in order to function properly.

Also called heart failure, congestive heart failure (CHF) is not a disease in itself, rather it is a symptom of an underlying disorder that can damage the heart. It may develop quickly (acute) or over a period of weeks or months (chronic). Most often it is slow to develop.

Congestive heart failure can affect cats of both sexes and cats of any age, although it tends to occur more in middle-aged to senior cats.

## Causes:

### Heart disorders:

- **Cardiomyopathy.** Diseases of the heart muscle itself, including dilated cardiomyopathy, restrictive cardiomyopathy and HCM ([hypertrophic cardiomyopathy](#)). HCM is the most common cause of heart disease in cats.
- Heartworms cause an immune response which can lead to the formation of blood clots, they also result in fluid leaking out of the arteries and into surrounding tissue. Over time, pulmonary hypertension develops, which leads to the right ventricle enlarging.
- **Myocarditis.** Inflammation of the heart muscle due to a viral infection or an inappropriate immune response.
- **Endocarditis.** Diseases of the heart valves.
- **Congenital** (present at birth) heart defects such as abnormal heart valves or hole in the heart.

### Other:

- [High blood pressure](#) results in the heart having to work harder, over time this can lead to a thickening and stiffening of the heart muscle.
- Tumours.
- [Acromegaly](#). A rare disease caused by the overproduction of growth hormone.
- [Hyperthyroidism](#), which can lead to high blood pressure.
- [Anemia](#) as a result of reduced red blood cells, the heart has to work harder to supply oxygen to the body.

### Symptoms:

The build-up of fluid within the air sacs in the lungs ([pulmonary edema](#)) and or in the pleural space that lies between the lungs and the chest wall ([pleural effusion](#)) both lead to common signs associated with heart failure which are linked to breathing difficulties. Left-sided heart failure is associated with pulmonary edema and right-sided is associated with pleural effusion. Common symptoms may include:

- Lethargy, sleeping more, disinterest in surroundings
- Coughing
- Shortness of breath
- Reluctance to exercise, or greatly reducing activity, walking where he would usually run, in severe cases your cat may refuse to move at all or when he does, will be exhausted afterward
- Increased respiration rate
- Fainting or collapsing
- Blue-tinged gums and tongue (cyanosis)
- Hind limb paralysis due to saddle thrombosis, a condition in which blood clots break free of the heart, travel along the aorta until they lodge in the arteries supplying blood to the legs
- Open-mouthed breathing
- Ascites (fluid-filled abdomen)
- Difficulty getting comfortable due to the build-up of fluid in or around the lungs. Your cat may sit in a hunched over position with his elbows pointing out, or change positions frequently.

It is useful for cat owners to be aware of their cat's resting respiration rate. The average is 20-30 breaths per minute. Closely watch the rise and fall of your cat's ribs and count for 15 seconds, then multiply that number by 4. Anything over 40 should be seen to by a veterinarian.

### Diagnosis:

Your veterinarian will perform a complete physical examination of your cat, listen to your cat's heart and lungs with a stethoscope and obtain a medical history from you including any medical disorders he has and the onset of symptoms. He will need to perform some diagnostic tests including:

- Routine tests including biochemical profile, complete blood count, and urinalysis to evaluate the overall health of your cat.
- Blood pressure check. Just as with humans, a cuff is placed around the front leg or tail of the cat along with a doppler.
- Radiographs to evaluate the heart and heart vessels and to look for fluid in the lungs or pleural cavity.
- Echocardiogram (ultrasound of the heart), to
- An antibody or antigen blood test to check for heartworm.
- Blood test to check for growth hormone for cats suspected of having acromegaly.
- Thoracentesis is the removal of fluid from the pleural cavity using a needle. This provides your veterinarian with fluid which should be examined to determine the type of fluid present and relieves pressure on the lungs, making breathing easier.
- Thyroid function tests to determine if the cause is due to hyperthyroidism.
- Arterial blood pressure to check for hypertension.

## **Treatment:**

Treatment for congestive heart failure is aimed at managing the medical cause of the condition as well as relieving symptoms associated with fluid build up in the lungs, pleural space, and abdomen. In a few situations, once the cause has been treated (such as hyperthyroidism) the heart may recover, however, most cases of CHF are irreversible but it may be managed to slow down the progress. Stabilising your cat if he has fluid build up in the lungs or pleural cavity, relieving symptoms and this may include:

- Oxygen therapy either with a mask or in an oxygen tent to avoid stressing him.
- Thoracentesis (as listed above).
- Diuretics such as Furosemide to remove fluid by increasing urine output.
- Vasodilators to open up the vessels, which helps prevent fluid buildup.
- Angiotensin-converting enzyme inhibitor (ACE inhibitor). These drugs help to relax blood vessels and lower blood pressure.

Other treatments depend on the underlying cause and may include:

- If your cat has a congenital heart or valve disorder, surgical repair may be necessary.
- Hyperthyroidism – Surgical removal of the tumour or radioactive iodine which destroys the tumour.
- Your cat will be put on a low salt diet, salt causes the body to retain too much fluid which can exacerbate symptoms of congestive heart failure.
- Radiotherapy to treat the tumour which causes acromegaly along with medications to inhibit the production or reduce levels of growth hormone in the blood.

## **Home care:**

- Follow your veterinarian's instructions and give all medications as prescribed.
- Most veterinarians will recommend restricted exercise and keep stress to an absolute minimum.

Cats will typically be on medication for the rest of their lives. Regular follow-up appointments will be necessary to monitor his progress.

