

Difficult Breathing in Dogs

Dogs pant. We all know that is normal. However there are times there is no good reason for the panting or he just cannot get comfortable while panting. He may not want to lay down and prefers to sit up, often with his head stretched out and his elbows sticking out. Some dogs do not pant but instead breath with exaggerated movements and visibly “working to breath”. He may just pace, lay down, pace, etc. If you look at their gums they are some other color than pink or red; they may be blue, gray, purple or even white. Go to

<http://www.veterinarypartner.com/Content.plx?P=A&S=0&C=0&A=355&EVetID=90000090> for emergency information if your pet cannot breath!

The most common of difficulty breathing in dogs is heart disease which causes fluid (water) to accumulate in the lungs. When this happens, we call it congestive heart failure. Other causes of difficulty breathing in dogs include air accumulating in the chest (outside the lungs) which is called pneumothorax, and pus accumulation in the chest which is called pyothorax.

Dogs generally have 2 types of heart disease. Older smaller breeds of dog develop heart murmurs due to worn out, leaky valves. As the valves leak, they allow blood to back up in the heart and eventually into the lungs. Up to a point the dog can compensate for this. But then one day there is just more fluid than there was yesterday and this amount is now too much. He feels as if he is drowning in his own fluid!

Large breeds usually have good valves but the heart can become stretched and weak to the point it is working much like worn out elastic. This is called Dilated Cardiomyopathy (“DCM”). It can no longer stretch back and push blood out of the heart, resulting in the blood backing just as in the smaller dog. A major critical difference though is that the larger dogs usually develop life threatening heart rhythms in addition to the fluid build up in their lungs. The combination of the two can be acutely fatal! See <http://www.veterinarypartner.com/Content.plx?P=A&S=0&C=0&A=2496&EVetID=90000090> for more information on DCM.

Initial treatment of both small and large dogs is similar but then there can be significant differences after that. The first and most important thing is to reduce the dog’s stress. This of course starts with you. Once in the hospital, your dog will probably get an injection of a diuretic to start getting fluid off its lungs.

Small dogs are frequently placed in an oxygen cage and nitroglycerin applied to the inside of their ears. (They don’t hold pills under their tongues like people do!). More diuretics will be given as needed to continue to remove the fluid from his lungs. X-rays will be taken as soon as it is safe for your dog. At that point the veterinarian will talk with you about additional diagnostic tests, prognosis and treatment.

It is seldom feasible to put large dogs in oxygen cages. Fortunately they don’t seem to need oxygen as often as small dogs. When they do however, nasal oxygen is used. X-rays are taken just like with the smaller dogs. Frequently an electrocardiogram (ECG or

EKG) will be done to determine what other course of treatment may be needed. Again, your veterinarian will talk with you about additional tests such as an echocardiogram (sonogram), blood tests, etc as well as prognosis and treatment.

Other causes of difficulty breathing in dogs can include pneumothorax, pyothorax and even accumulation of blood around the heart (hemopericardium or pericardial effusion).

Pneumothorax is most commonly seen after a dog has been hit by a car and a lung has been ruptured or lacerated. Spontaneous pneumothorax, or sudden accumulation of air inside the chest, can occur without any history of trauma. This is not an uncommon problem in people. We see it occasionally in dogs as well. Usually a small air filled blister has formed on the surface of the lung and one day it bursts. This allows air to leak out of the lung and into the space between the inside of the chest wall and the lungs. As the air builds up, it compresses the lungs, making it harder and harder for the animal to breathe. Treatment involves putting a needle into the chest to remove the air. Sometimes a tube has to be placed to allow the air to be repeatedly removed if it continues to leak and build up. Rarely surgery will be necessary to remove the leaking lung.

Pyothorax is commonly seen in hunting dogs. As they go thru brush and weeds, they may inhale a piece of grass or a thorn that lodges in the lungs. These are not sterile and carry bacteria into the lung with them. Because they are pointed and sharp, they frequently puncture the lung. Like a nail in a tire, it may plug its own hole so no air leaks out but the nasty bacteria result in a nasty infection in the lung and space between the lung and chest wall. This is a slowly progressive process though. By the time there are obvious signs that something is wrong, it has been going on for several months. A lot of damage has been done to the lungs and the inside of the chest wall. Initial treatment is similar to that of pneumothorax—a needle or tube is inserted to remove the pus. However, surgery is frequently needed to remove all the pus and nastiness. Ironically, the offending piece of grass or thorn is seldom found.

Hemopericardium (“hemo” = blood; “pericardium” = sac around the heart) is a condition in which blood accumulates in the sac that surrounds the heart. This sac is very thick and non-elastic so it does not stretch as it fills with blood. As result, the heart cannot fill with blood and blood is not pumped to the lungs or to the body. Blood does not back up into the lungs since blood is not entering the heart well. The dog is showing signs of difficulty breathing because the body perceives a lack of oxygen since blood is not being pumped well. When the body thinks it needs more oxygen, the lungs work harder. This looks like your dog is having trouble breathing.

Hemopericardium/pericardial effusion is a serious, immediately life threatening condition. It is commonly caused by a tumor growing off the heart that has started to bleed. While heart surgery is common in people, it is rarely performed successfully in dogs.

Your veterinarian will discuss the cause of your pet’s difficulty breathing and the associated prognosis and treatment.