

# **Breathing Problems in Bulldogs**

Bulldogs are prone to a number of breathing disorders. In fact, all “brachycephalic” breeds can tend to have these problems, but bulldogs tend to be the worst. “Brachycephalic” is the medical term for “short head.” In other words, the brachycephalic breeds are those who appear to have a very flat face with a short nose.

## **Elongated Soft Palate:**

This is the most common breathing disorder in bulldogs, and often what makes them “snort” as they breathe, and snore when they sleep. The soft palate is a flap of tissue at the back of the throat that continues backward from the roof of the mouth. If the palate is too long, it blocks the airway making it difficult for the dog to breathe. The dog can also choke on or spit up pieces of kibble and even pass out from lack of air if the problem is severe. Signs of elongated soft palate include excessive panting, unable to calm down quickly when excited, and noisy breathing when overheated.

A vet can check the palate by looking down the dog's throat, many times while the dog is awake if he/she is calm and will allow it. Otherwise, a mild sedative can be given so the vet can do a thorough examination.

Surgery can be done to shorten the palate but is not suggested until the dog is about a year old as the palate may still grow when they are pups, and if surgery is done too young, another procedure may be required at a later date. Sometimes the dog may need to have laryngeal sacculs removed also (see “everted sacculs” below), and this can be done during the palate surgery if required. During post-op recovery, only soft food should be given to allow the throat time to heal. Hard kibble can be irritating. Healing time varies by dog but normal time is from 2-3 weeks.

## **Hypoplastic (small) Trachea:**

The trachea is the tube that carries air from the mouth to the lungs, commonly referred to as the “wind pipe.” Bulldogs tend to have small tracheas considering their size. The most common signs of hypoplastic trachea are shortness of breath, gurgling sounds (moisture and secretions in the airways), and wheezing when breathing. The only way to know if your dog has this is to have your vet take an x-ray. Unfortunately, nothing can be surgically done to correct this problem. The best way to treat this is to limit strenuous exercise, keep the dog's weight down, avoid stressful situations, and avoid overheating. In other words, problems are prevented by not allowing the bulldog to get into situations where they need more oxygen to their lungs than their small trachea can carry. The less weight, the more room for oxygen exchange, and the less strain on the body. Many bulldogs with hypoplastic trachea live long and happy lives with this as long as they are monitored carefully.

## **Stenotic (Pinched) Nares:**

With this problem, the nares (nostrils) are pinched tight so the dog doesn't get a good amount of air through the nose. Nares can be widened with surgery. The nares are actually trimmed surgically, allowing a larger opening to let more air pass. Bulldogs with stenotic nares often can not breathe well with their mouth closed.

## **Everted Saccules:**

There are small sacs on the inner surface of both sides of the voice box in all dogs, called laryngeal saccules. In some dogs that have other respiratory problems, as increased air moves across these saccules, they can turn inside-out, becoming “everted.” These everted saccules further obstruct air movement through the airway, compounding the other respiratory problems.

## **Redundant Esophagus:**

Bull dogs often have excess tissue in their esophagus, which predisposes them to sucking bits of food into the lungs, leading to a condition called aspiration pneumonia. This can lead to chronic inflammation in the lungs, called COPD (chronic obstructive pulmonary disease), and chronically low oxygen levels in the body. COPD can make worse any other respiratory problem that a bulldog may have. COPD is diagnosed by various tests done by a veterinarian – chest x-rays and airway wash are a few. COPD is treated with various respiratory and anti-inflammatory medications. We have another detailed handout on this problem for more information, should your bullie suffer from COPD. There is no effective treatment for redundant esophagus. The esophagus does not heal well after surgery, and doing surgery on this type of esophageal problem can cause more problems than it solves. At this time, there are no medications available that improve redundant esophagus.

## **Reverse Sneezing:**

The real name for reverse sneezing is paroxysmal respiration. Paroxysmal respiration is commonly described as a “reverse sneeze” because for all purposes it does look as if a dog is trying to inhale a sneeze. When this occurs, your bullie will appear to be snorting or choking with the neck extended and the chest expanded (elbows out), as he or she struggles to take in air.

In most cases, this not a serious problem and it looks much more horrifying than it is. If this is happening to your bulldog, do not panic. You can help him or her by soothingly stroking the upper throat area to encourage relaxation. Others have had success gently covering the nostrils until the bulldog swallows (releasing the reverse sneeze), or squirting a small amount of water into the mouth for them to swallow. It is important to remember that most reverse sneezing attacks will stop without doing anything at all.

A bulldog who has lifelong episodes of reverse sneezing which tend to not worsen probably needs no treatment. However, reverse sneezing fits that suddenly change, becoming more frequent or more severe, can indicate a problem such as sinus infection or obstruction in the nasal passages. Nasal obstructions can be caused by something getting lodged in the nose, infection, or a tumor growing there.

## **Heat Stroke:**

Because of all these upper respiratory obstructions, the brachycephalic dog pants inefficiently. A dog with a more conventional face and throat is able to pass air quickly over the tongue through panting. Saliva evaporates from the tongue as air is passed across and the blood circulating through the tongue is efficiently cooled and circulated back to the rest of the body.

In the brachycephalic dog, so much extra work is required to move the same amount of air that the airways become inflamed and swollen. This leads to a more severe obstruction, distress, and further over-heating.

**BRACHYCEPHALIC DOGS ARE THE MOST LIKELY CANDIDATES FOR HEAT STROKE.**

Altogether, the upper airways of the brachycephalic dog compromise the ability to take in air. Under normal conditions the compromise is not great enough to cause a problem; however, an owner should take care not to let the dog become grossly overweight or get too hot in the summer. Be aware of what degree of snorting and sputtering is usual for your pet, and should your dog require general anesthesia or sedation, your vet may want to take extra precautions or take radiographs beforehand to assess the severity of the syndrome. Anesthetic risk is higher than usual in these breeds, though under most circumstances the necessary extra precautions are readily managed by most animal hospitals.

## **Non-Cardiogenic Pulmonary Edema**

This is also called ARDS (Acute Respiratory Distress Syndrome), and is probably the most life threatening of all of the bullie breathing problems.

All of the above problems mean that bulldogs may not have much “respiratory reserve” to carry enough oxygen in the blood when increased oxygen is needed. Sometimes this might occur include:

- Exposure to heat
- Excitement or exercise
- Pulling on a collar and leash during a walk
- Restraint at the trainer, groomer or veterinarian
- Lung or heart disease
- Sedation or anesthesia, as is needed for surgery

Should your bulldog ever develop respiratory distress, it is important that your pet see a vet immediately, to be sedated and have their airway opened. Early intervention is necessary to avoid disaster. A bad respiratory attack can be fatal to a bulldog if treatment is delayed.