



# Asthma and Bronchitis in Cats

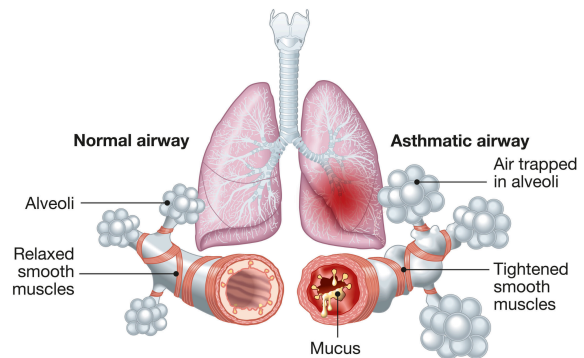
## ***What is Asthma?***

Technically, asthma is an acute or chronic inflammation of the airways associated with several physiological effects including increased responsiveness to inhaled stimuli, narrowing/constriction of the airways, and the presence of inflammatory cells in the airways.

## ***What is Bronchitis?***

Feline bronchitis describes the coughing and/or wheezing that comes from inflammation of the lower airway.

Asthma and bronchitis are typically considered two parts of the same syndrome; which is often referred to as chronic obstructive pulmonary disease (COPD). If a cat's airways are sensitive to certain stimuli, exposure to this stimulus will trigger an inflammatory response. Once exposed, a cat will experience bronchial (airway) spasms, increased mucus production, and possible accumulation of the mucus in the airways. Inability to clear the mucus can lead to airway obstructions and can result in secondary respiratory infections. Chronic airway obstructions may trap air in the alveoli (air sacs in the lungs), leading to over-inflation and lung damage.



## ***Who is at risk?***

Asthma and bronchitis are seen most commonly in cats ages 2-8, but it can be seen in all ages. Siamese cats seem to be at a higher risk than other breeds. Overweight and obese cats are at a greater risk for developing chronic respiratory disease. Dental disease increases the risk, as bacteria can travel from the mouth into the blood/lungs and cause a serious secondary infection.

## ***What causes these conditions?***

The cause of inflammation associated with feline asthma and bronchitis is unknown. There are many reported triggers that contribute to the inflammation that causes these conditions. Triggers are as follows; cat litter, cigarette smoke, perfume,

hairspray, carpet cleaners, air fresheners, laundry detergent/fabric softeners (scented), mold/mildew, and essential oil diffusers.

### ***How is asthma diagnosed in cats?***

Diagnosing asthma and bronchitis in cats requires ruling out other diseases that cause respiratory signs. These diseases include infectious pneumonia (fungal, bacterial, or parasitic), feline heartworm disease, primary lung parasites, and cancer. Diagnostic tests will include a complete blood count (CBC), blood chemistries, and a fecal exam. These tests will assess the general health of your cat and may provide clues as to the underlying cause. One type of white blood cell, the eosinophil, is commonly associated with allergic events or parasitic disease and its presence supports a tentative diagnosis of asthma. Additional testing will include radiographs, and may include a heartworm test. There are several characteristic changes seen on lung radiographs in cats with asthma and bronchitis. Radiographs can help eliminate other lung and heart diseases. For instance, feline heartworm and lungworm create specific suggestive lesions that can be seen on radiographs.

### ***How is asthma treated?***

Successful management of feline asthma and bronchitis typically involves some combination of the following:



1. Avoiding triggers- Any triggers that aggravate breathing problems in cats with this diagnosis should be avoided. This means trying low-dust cat litter, eliminating cigarette smoke from the home, minimizing any dust buildup, using air filters/purifiers, etc. It is important to pay close attention to environmental factors that may aggravate or worsen your cat's condition.

2. Improving body condition- Being overweight or obese causes systemic inflammation that can contribute to feline asthma and bronchitis, as well as increase the workload on the heart and lungs. Improving body condition is critical to success.

3. Bronchodilators- Bronchodilators are used to open the airways, allowing your cat to move air in and out of the lungs more freely. They are usually administered in an inhaled form, such as albuterol/salbutamol (Ventolin®). For this to be effective, they need to be used consistently, as directed by your veterinarian.



4. Corticosteroids- Corticosteroids have potent anti-inflammatory effects and can provide relief to cats experiencing the respiratory distress of asthma and bronchitis. A cat may receive an injection of a long-acting corticosteroid (such as Depo-Medrol®) that can relieve symptoms for several weeks to several months. More commonly, a cat may be prescribed a short course of oral corticosteroids combined with an inhaled corticosteroid, such as fluticasone (Flovent®), to limit the effects of the steroid to the lungs and minimize negative side effects. There is also a combination bronchodilator-corticosteroid combining fluticasone and the bronchodilator salmeterol (Advair®) in the same inhaler.

5. Hypoallergenic nutrient profile- Your cat may benefit from a diet that is either less allergenic or truly hypoallergenic. Nutrition takes time to have its effect on cats with asthma and bronchitis but may lower the reliance on medication.

There is no treatment for asthma and bronchitis in cats, but with a good treatment regimen, cats with this condition can live full, active lives.