So my cat has lower airway disease

What is lower airway disease?
Lower airway disease is disease of the lungs and the bronchi (airways that supply oxygen to the lungs). This is in contrast to upper airway disease, which includes the nose and pharynx/larynx.

What causes lower airway disease?
There are multiple causes of lower airway disease including:
- Asthma - Disorder of the lower airways causing limitations in airflow. This decreased airflow is typically caused by narrowing or constricting bronchi (small airways). Can have environmental triggers such as pollens, molds, perfumes, or smoke.
- Chronic bronchitis - Inflammatory condition of the lower airways.
- Parasites.
- Infections.
- Pneumonia.
- Heartworm - although heartworm is not common in this part of the country and the infection is seen less commonly in cats than dogs there is still a risk for infection especially with increased movement of adoptable cats in shelters.
- Cardiac disease - Not as commonly seen as a cause of lower airway disease in cats but can occur.
- Cancer - either primary lung tumors or metastatic disease.

What is the difference between asthma and chronic bronchitis?
Asthma and bronchitis are both common chronic lower airway diseases in cats. While the definition of the diseases are different (see above) they often will behave in a similar manor. Additionally asthma and bronchitis are very challenging to differentiate from one another despite advanced testing. Finally treatment is similar for both diseases. Thus we typically diagnose/treat the two diseases as one entity - “asthma”

What are the common clinical signs of lower airway disease?
There are multiple clinical signs
- Coughing - the cough may come and go or be daily.
- Wheezing.
- Increased respiratory effort and rate.
- Exercise intolerance.
- Open mouth breathing - this is a medial emergency and your pet should be seen right away.
How is lower airway disease diagnosed?
The first step in diagnosing lower airway disease is a complete history and a full physical examination. Based on the history and clinical signs some or all of the diagnostic tests below may be recommended.

- Deworming - this is a good first step as it is easy and cost effective.
- Antibiotic trial - for many of our cats who just recently developed a cough an antibiotic trial will be recommended to rule out a lung infection. If the coughing stops no further testing is needed.
- Radiographs (x-rays) - this is the hallmark diagnostic tool for most cases of lower airway disease. Asthma can usually be diagnosed from a chest x-ray and many diseases can be ruled out. Depending on the results of the radiographs further testing - such as heartworm testing, echocardiogram, or an airway wash may be recommended.

How is asthma treated?
If your cat is diagnosed with asthma the therapy is steroids. We will complete full blood work at this time to monitor for any changes induced by the steroids. Prednisolone, the steroid of choice, comes traditionally as a pill but it can be compounded into a liquid if that is easy to give. Long- term steroid use runs the risk of inducing diabetes and thus inhaled steroids using an Aerokat chamber are a possibility for cats who require long term therapy. Let us know if this is something you are interested in!

Bronchodilators, such as albuterol or terbutaline, may be used especially in times of an active attack. Not all asthmatics require bronchodilators. We will discuss this further if we think your cat could benefit from a bronchodilator.

What monitoring is required?
Any patient on long- term prescription medication is required to have a yearly physical exam and blood work. Additionally radiographs may be recommended at certain intervals if we are having a hard time controlling your cats clinical signs.

What if I don’t treat my cat for lower airway disease?
The outcome of an untreated cat depends on the severity of the disease/ clinical signs in that individual. Some untreated asthmatics may simply cough for years while others can develop respiratory distress with death as the worse case scenario.

What if I want to learn more about lower airway disease?
If you have any questions please do not hesitate to ask us! We are happy to discuss this disease and treatment options further! Additionally we have more in depth hand- outs if you would like.

Sources
The Feline Patient 4th edition 2011
Handout created by Dr. Zaya McSky, DVM