

Asthma



What is asthma?

Asthma is a chronic inflammatory common disease of the lungs that could potentially be fatal.



Lungs and Breathing:

Oxygen is vital for life. Without it, death occurs very rapidly. The lungs allow us to fill our blood with oxygen. The air we breathe comes in close contact with the blood in the depth of the lungs. The blood then fills up with oxygen and releases unwanted carbon dioxide, CO₂.

When we breathe, the air goes through the mouth and nose. From there it goes to the air pipe, known as the trachea. From the trachea it goes into an increasing number of smaller tubes, called bronchial tubes.



Small balloon-like sacs called alveoli are at the end of the tubes. The walls of the alveoli are very thin. On the other side of the walls small blood vessels exist. The very thin wall of the alveoli allows the oxygen to go into the bloodstream and also allows CO₂ to go from the blood to your lungs to be exhaled.

Muscles surround the bigger bronchial tubes. The inner lining of these bronchial tubes secretes special substances called mucus. The mucus help trap dirt from the air. Mucus is continuously expelled from the lungs.



Very small brushes, know as cilia, on the outside of the lung cells continuously push the mucus to the outside. if the mucus becomes sufficiently big, it is coughed out.

What are asthma's symptoms and their causes?

Asthma is a condition that makes breathing difficult. This causes a feeling of tightness in the chest.



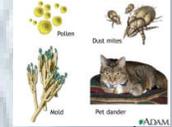
Patients with asthma are sensitive to certain materials that cause an inflammation or swelling of the inner lining of the lungs. This swelling can cause narrowing of the air passages. The swelling and inflammation of the inner lining of the lungs can lead to symptoms such as difficulty breathing and tightness in the chest. The muscles around the bronchial tubes could also tighten abnormally resulting in further narrowing of the air passages.



When an asthma attack occurs, the lining of the lungs quickly becomes swollen. The air passage fill up with thick mucus and the muscles around the bronchial tubes tighten. This greatly decreases the airflow in the lungs: this could potentially be life threatening.

How can asthma be triggered?

Many things can lead to the inflammation of the lungs and abnormal muscle tightening, these known as triggers. Triggers can be:



- Substances to which a person may be allergic.
- Animal hair or secretions, mold, pollen and dust are examples of allergens.
- Extreme conditions, such as very cold or very hot weather.
- Particles in the air from car exhaust or other pollution and medications such as aspirin.
- Food additives, such as sulfites.
- Some diseases such as colds.
- Stress and bouts of extreme laughter or crying.

How can asthma be diagnosed?

Repeated occurrences of difficulty breathing and wheezing are indications that the patient may have asthma.



After taking a detailed medical history and listening to your lungs, your physician may ask you to have special test done known as Pulmonary Function Test. This test aims at determining the ability of your lungs to function.



Peak flow measurement is a part of this test that the patient may be asked to perform on his or her own following the visit to the physician. The test allows patients to monitor their own progress.