

Fond Du Lac Human Services
Division Pharmacies



Medicine Talk

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Asthma is a chronic, non-contagious inflammatory disorder of the airways. People with asthma experience recurrent episodes of wheezing, coughing and shortness of breath. Approximately 5% of Americans have asthma. Over the past 12 years, the cases of asthma have increased drastically and it is now the leading chronic illness among children.

What leads to the development of asthma?

A person is at risk for developing asthma if one or both parents have asthma or allergies. If a person has indoor or outdoor allergies, he/she is at greater risk of developing asthma. Occupational hazards such as inhaling chemical irritants or smoke can contribute to the development of asthma. Other factors that can play a role in the development of asthma are respiratory infections, small birth size, poor diet, air pollution, smoking, and exposure to second hand smoke.

How does asthma affect the body?

Asthma obstructs airflow through the lungs. That means it is harder to move air in and out of the lungs when breathing. This is due to several factors:

- ✓ There is inflammation and swelling in the airways
- ✓ The airways are constricted, or tight
- ✓ There is edema, or fluid build-up in the airways
- ✓ There is excess mucus in the airways

What can aggravate asthma symptoms?

Each person is different when it comes to what aggravates or worsens his or her asthma. Common factors that can lead to an asthma exacerbation are:

- Allergies
- Respiratory infections
- Exercise
- Cold air
- Certain drugs (aspirin, certain heart medications, certain eye drops)
- Weather changes
- Exposure to irritants or chemicals

How can asthma be controlled?

Asthma is controlled with inhaled and/or oral medications and lifestyle modifications. What medication(s) a person is on depends on the severity of his or her symptoms. Some people have *exercise-induced asthma* which means that the only time symptoms arise is when exercise is involved. Pre-exercise treatment with an inhaler might be the only medication these asthmatics need. On the other hand, a person with constant daytime symptoms and frequent nighttime symptoms may need a more aggressive medication regimen.

In an asthmatic with allergy triggers, asthma can be controlled with environmental changes such as eliminating exposure to pet dander, second hand smoke or dust mites. Because asthma symptoms and triggers can differ from person to person, an individualized treatment plan must be made for each asthmatic.

What types of medications are used to treat asthma?

The most common medications used to control asthma are steroid inhalers (**Flovent™**, **Azmacort™**). Steroids are the only class of medications that reduce airway inflammation. Steroid inhalers are termed “maintenance medications” because they control the underlying cause of asthma but do not provide rapid relief. If an asthmatic has been given a steroid inhaler as part of his or her medication regimen, it should be considered **the most important** drug. Even though these medications do not provide rapid relief, they reverse and prevent the swelling that causes the symptoms of asthma. Another common medication is albuterol. This medication helps in acute situations when immediate relief from asthma symptoms is needed. Albuterol acts by relaxing the muscle in the airways making it easier to breath. Albuterol does not stop or prevent the progression of inflammation, thus, it is not considered a daily medication for the treatment of asthma and should not be used on a daily basis. A good rule of thumb is: If you have asthma and you are using your albuterol inhaler more than 2 times per week or you are using more than 2 full albuterol inhalers per year, your asthma is not controlled – see your doctor! Long-acting albuterol products such as Serevent™ can be used daily in combination with steroid inhalers such is found in Advair™. Other medications that are sometimes used in asthma are allergy medications (loratadine, Allegra™, Zyrtec™) and medications such as Singulair™ which may help a small part of the population. Medications such as theophylline and cromolyn, which were popular in years past, are not used as much today but are still useful when prescribed.

Where can I find more information about asthma?

- 1) NHLBI Asthma Reading and Resource List &
- 2) Resource list for Asthma Education in the Schools

Request both from:

NHLBI Information Center
PO Box 30105 Bethesda, MD 20824-0105

- ✓ Single copies are free
- ✓ Provides materials on asthma for patients and families
- ✓ Provides organizations that work with and for asthma patients

www.alamni.org
www.nhlbi.gov