



What You Need to Know About Asthma

What is asthma?

Asthma is a disease of the lungs. The airways are always a little swollen. When you exercise or breathe something that irritates your lungs, the muscles in your lungs start to tighten. The insides of your airways get more swollen. Your airways make more mucous.

What are the symptoms?

- cough
- shortness of breath
- wheezing
- chest tightness

What can cause an asthma attack?

Triggers are things that make you have an asthma attack. Ask your health-care provider for help in deciding what triggers you need to avoid. These triggers are different for everyone.

Triggers that can cause asthma attacks include:

- cold air
- dust mites
- smoke
- chemical fumes
- pollens
- pets
- molds
- air pollution
- exercise
- emotions
- respiratory infections.

If you have asthma it is extremely important to avoid, reduce or get rid of your asthma triggers.

How can asthma be treated?

Asthma Medications

There are two main kinds of asthma medications: rescue (fast-acting) medications and controller medications.

Rescue medications help stop symptoms of asthma attacks by opening up airways. These medicines can relieve symptoms within minutes but they do not reduce or prevent the inflammation (swelling) that causes the symptoms. You need to have a rescue medication on hand for when you have an asthma attack. Some commonly used rescue medications are:

- Albuterol (Proventil™, Ventolin™)
- Lev-albuterol (Xopenex™)
- Pirbuterol (Maxair™)

Controller medications help prevent and reverse asthma attacks by decreasing the inflammation (swelling) in the airways. They actually treat the disease, not just the symptoms, but must be used every day for them to work effectively.

You need to use a controller medication if you have persistent asthma.

Persistent asthma is when your airways are swollen enough all the time that you have asthma symptoms (cough, wheeze, shortness of breath) often, like twice a week or more, or twice a month during sleep.

Asthma control medications include inhaled corticosteroids such as:

- Budesonide (Pulmicort™)
- Fluticasone (Flovent™)
- Beclomethasone (Qvar™)
- Flunisolide (Aerobid™)
- Triamcinolone (Azmacort™)

and inhaled mast cell stabilizers like:

- Nedocromil (Tilade™)

- Cromolyn (Intal™)

as well as oral (tablet) "leukotriene modifiers" like:

- Montelukast (Singulair™)
- Zafirlukast (Accolate™)

Inhaled steroids are usually used first because they work best. Sometimes leukotriene modifiers may be used alone, especially if you have significant allergies and have mild asthma. You may need a combination of medications, including those below.

Other medications used for asthma include oral corticosteroids, used for severe attacks, and long-acting bronchodilators, which relieve symptoms like rescue medications, but which start to work more slowly and are not used for acute attacks.

Oral corticosteroids include:

- Prednisone tablets
- Prednisolone liquid

Long-acting bronchodilators, which should not be used without an inhaled corticosteroid, include:

- Salmeterol (Serevent™) inhaler
- Formoterol (Foradil™) inhaler

You may use a long acting bronchodilator that comes with an inhaled steroid in the same inhaler, such as

- Salmeterol with fluticasone (Advair™) inhaler
- Formoterol with budesonide (Symbicort™) inhaler

Inhaler use:

Some of the medications listed above are prescribed in a metered dose inhaler form ([How to Use MDI](#)). Correct use of the inhaler is very important. Adults and older children can usually use an inhaler with a spacer and a mouthpiece ([Valved Holding Chamber](#)). Younger children or people that have difficulty with the chamber with the mask should use the chamber with a mask ([Valved](#)

[Holding Chamber Mask](#)). Small children, babies, or anyone with a very severe attack may need to use a nebulizer ([How to give nebulized medicines](#)).

What are signs that my asthma is not well-controlled?

Monitoring your Asthma

Many people can tell when their asthma is not well-controlled by their symptoms, such as:

- Wheezing
- Shortness of breath
- Cough
- Waking from sleep
- Unable to do some of your usual activities

If you have trouble telling when you are having an asthma attack or your asthma is difficult to control, you should learn to monitor yourself with a peak flow meter. (PFM link)

What are Asthma Action Plans?

No matter how severe your asthma is, our goal is for you to be able to have a normal active life, through having good control of you asthma. You may need to increase your medication and /or learn more about your triggers if your asthma is not well-controlled. You can learn to control your asthma with a written plan from your health care provider that tells you what to do when you are doing well (green zone, all clear). It will also help you decide what to do when you are not doing well (yellow and red zones). The Asthma Action Plan summarizes everything you need to know about your asthma on one sheet.

Disclaimer: This document is for informational purposes only and is not intended to take the place of the care and attention of your personal physician or other professional medical services. Talk with your doctor if you have Questions about individual health concerns or specific treatment options.

©2011 The Regents of the University of Michigan
Patient Education Handout associated with UMHS Clinical Care Guideline
Last Revised: January 26, 2012