

Asthma

You can get asthma at any age. Approximately 5% of the general population in the U.S. has asthma. Often there is a history of allergies and/or asthma in a family member. Like branches of a tree, your breathing airways get smaller and smaller until they reach the air sacs that make up the lungs. Asthma is caused when the airways are inflamed and spasm. When asthma is under control, the airways are clear and air flows in and out of your chest easily. When asthma is not under control, the airways become constricted and inflamed, with increased mucus production that further obstructs the airways.

During an asthma attack, less air can get in and out of the lungs, causing coughing, wheezing, and shortness of breath. Coughing for more than 10 days after a cold can also be a symptom of asthma. Sometimes prolonged coughing is the only symptom that people experience.

DIAGNOSIS

Your medical provider can diagnose asthma in the office. If this is your first episode, laboratory tests or x-rays may be ordered. Using a peak flow meter is a quick and easy method of measuring the amount of air flowing through your airways. If your asthma is moderate to severe, your provider may have you repeat this breathing measurement at home to help you adjust your medicine.

SEVERITY

- **Intermittent:** Symptoms occur sporadically in response to a trigger, and there are no symptoms between episodes.
- **Mild:** Symptoms 1 to 2 times per week, a normal peak flow, and night coughing 1 to 2 times per month.
- **Moderate:** Symptoms present 1 to 2 times per week, a peak flow 60% to 80% of the predicted norm, and night coughing 2 to 3 times per week.
- **Severe:** Daily symptoms with limited physical activity, night wakening more than 3 times per week, and a peak flow of less than 60% of the predicted norm.

PREVENTION

Factors that cause asthma attacks are called triggers. Triggers can be animals with fur, cigarette smoke, dust, down bedding, perfumes, pollen, cold air, upper respiratory infections, exercise and acid reflux. It is important to note which triggers may be causing your asthma symptoms. Your primary care provider can help you determine which steps to take to help avoid triggers.

Avoiding triggers that can set off your asthma is the best way of preventing attacks. Another important step is to drink plenty of water. Fluids keep normal lung mucus from becoming sticky. Try to drink 1 glass of water every 2 hours while awake. Keep pets outside if you cannot avoid completely.

Measuring your peak flow regularly will help you assess your own level of asthma control and identify when you are in trouble. Peak flow readings provide an objective measure to help your health care provider evaluate your status and give you the right treatment advice.

REDUCING IMPACT OF TRIGGERS

Dust/Dust Mite Allergy

- Remove rugs, carpet and extra pillows.
- Use mattress and pillow coverings to avoid dust mites.
- Do not use down comforters or pillows.
- Wash sheets and blankets in hot water weekly.
- Vacuum often.

Allergies/Hay Fever

- Take antihistamines and other allergy medications as prescribed to control symptoms.
- Your medical provider may suggest an evaluation by an allergist if the allergies are a significant trigger for your asthma attacks.

Upper Respiratory Infections

- Discuss with your medical provider whether or not a flu shot is appropriate.
- Careful hand washing can help to prevent frequent colds.
- Do not directly share food, drinks or eating utensils.
- Start the asthma inhaler at the first sign of coughing or wheezing.

Smoke or Odors

- Avoid smoke-filled places.
- Use unscented soaps and detergents.
- Do not use perfumes or colognes.

Cold Air

- Wear a scarf over your mouth and nose to warm the air you breathe.

Exercise

- Use medicines prescribed by your medical provider before exercising to help prevent attacks.
- Always carry medication with you while exercising, and be prepared to stop at the first sign of an attack.

Animal Fur

- Avoid animals with fur.

DEALING WITH AN ASTHMA ATTACK

Act fast if an asthma attack starts:

- Know the signs of an asthma attack – coughing, wheezing, tight chest, and waking up at night.
- Move away from the thing that started the attack, if you can identify it.
- Take a quick-relief asthma medicine.
- Stay calm for 1 hour to be sure breathing gets better.

Get emergency help if you experience any of these asthma danger signs:

- Your quick-relief medicine does not help for very long or does not help at all.
- Breathing is still fast and hard.
- It is hard to talk.
- Your lips or fingernails turn gray or blue.
- Your heartbeat or pulse is very fast.
- You can see the skin around your ribs pulling in when breathing.
- It is hard to walk.

Asthma

MEDICATIONS

While avoiding triggers is the first approach to asthma management, medicines will help keep your symptoms under control. It is very important that you use the medicines correctly, and at the correct intervals as prescribed.

Four classes of medicines are most commonly used to treat asthma symptoms. Your primary care provider will choose one or more of these medicines based on the causes and severity of your asthma symptoms. Most of the medicines are inhaled so that the maximum effects go straight to the airways. To improve the dose of the inhaled medicine that gets to your lungs, your medical provider may prescribe a spacer device to be attached to the inhaler.

Short-acting inhaled bronchodilators

(e.g., Ventolin, Albuterol, Proventil)

These quick-relief medicines act on the smooth muscle lining the airways to help reverse the spasm and narrowing of the airways. The effects are felt immediately. This medicine may be prescribed on a regular basis, or as needed for symptoms which are intermittent. You may feel a little jittery, light-headed or racy after starting this medicine. These symptoms usually diminish with subsequent doses. If your symptoms are not relieved with the prescribed inhalations, call your medical provider. Do not exceed the prescribed number of inhalations. If you need this quick-relief medicine more than 6 times in one day to control asthma attacks, you need immediate help from your medical provider.

Long acting inhaled bronchodilators (e.g., Serevent)

These medications have the same action on the airways as short-acting bronchodilators but deliver that effect over a prolonged period, often making them useful for people with nighttime symptoms. They are not to be used for quick relief of asthma symptoms.

Steroids (e.g., Flovent, Beclovent, Vanceril, Aerobid)

These medicines reverse the inflammation in the airways which is present in patients with chronic asthma symptoms. Inhaled steroids need to be used on a regular, ongoing basis to be effective. They have no effect on acute shortness of breath and should not be used on an intermittent basis. In some cases, your asthma symptoms may be severe enough to require a short course of oral steroids. Oral steroids are best taken in the morning; be sure to take the medicine exactly as directed. Inhaled steroids have minimal side effects. Remember to rinse out your mouth with water after each use of inhaled steroids.

Cromolyn sodium (e.g., Intal, Tilade)

These medicines act to prevent the inflammatory response in the lining of the airways. If your asthma is triggered mainly by allergic factors, your medical provider may have you start Cromolyn before allergy-induced asthma symptoms begin. Cromolyn can be used daily or intermittently. For example, you might use Cromolyn 30 minutes before going to a house with a pet, or on a regular, ongoing basis during hay fever season.

SCHEDULING AN APPOINTMENT

Call 275-2662 to schedule an appointment at the University Health Service (UHS). UHS offers a full range of services. All visits to UHS are confidential.

LINKS

To learn more about Asthma, you can visit:

American Academy of Allergy, Asthma, and Immunology
<http://www.aaaai.org/>

American Lung Association
<http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=22542>