

Exercise-Induced Asthma

Exercise can make asthma symptoms worse. This is called exercise-induced asthma. Exercise can cause asthma symptoms in up to 80 percent of people with asthma. Treatment and monitoring can allow people with exercise-induced asthma to participate fully in the physical activity or exercise of their choice.

How Will I Know If I Have Exercise-Induced Asthma?

For some people, exercise-induced asthma occurs within three to eight minutes of starting activity or exercise. For others, exercise-induced asthma occurs after stopping exercise. Often the exercise-induced asthma starts during exercise and worsens when exercise stops. The most common symptoms of exercise-induced asthma are:

- Coughing
- Wheezing
- Shortness of breath
- Chest tightness

Some people are not aware of these symptoms but know they tire easily and have a hard time keeping up with others. It is important to recognize the difference between poor conditioning and exercise-induced asthma. In well-conditioned athletes, symptoms of exercise-induced asthma may only occur with the most vigorous activity or exercise.

Think about how you feel when you exercise. Do you tire easily or cough and wheeze? Share this information with your health care provider. Your health care provider will ask you questions about your asthma and do a physical exam. He or she may also order a test called an exercise challenge to help diagnose exercise-induced asthma. An exercise challenge may be done in your doctor's office or the hospital. During an exercise challenge, you will walk or run on a treadmill or ride an exercise bicycle and perform repeated breathing tests. Using this information, your health care provider will be able to understand if exercise can make your asthma symptoms worse.

How Is Exercise-Induced Asthma Treated?

There is a simple and effective way of treating exercise-induced asthma. Your health care provider may prescribe a "pre-treatment." A pre-treatment is a medicine that is inhaled before exercise. By using a prescribed pre-treatment, people with asthma are often able to participate safely and successfully in the exercise they enjoy. A pre-treatment can prevent asthma symptoms during and after exercise. Examples of inhaled medicines often used as a pre-treatment include:



- ProAir®, Proventil HFA®, VentolinHFA® (albuterol)
- Xopenex® (levalbuterol)

These medicines are often prescribed 10 to 15 minutes before exercise and quickly open the airways to prevent asthma symptoms. Discuss the use of a pre-treatment with your health care provider.

Some people with exercise-induced asthma respond well to other medications. In all cases, work with your health care provider to decide the pre-treatment that is right for you.

Regardless of which inhaled medicine you use, it is important to use good technique. Good technique helps you get the full dosage and benefit from the medicine. Using a spacer device with your metered-dose-inhaler can improve delivery of the medicine to your airways. Review your inhaled medicine technique with your health care provider at your next visit.

If your asthma symptoms are occurring more often with exercise or are more severe talk your health care provider. Your health care provider may increase the medicine you take every day (long-term control medicine) to get your asthma under better control.

Monitoring Exercise-Induced Asthma

Monitor your asthma while you exercise by watching for asthma symptoms. The peak flow meter can also be useful in monitoring your asthma. A peak flow meter is a portable, hand-held device that measures how fast you blow air out. When the airways are narrowed by asthma, the peak flow number will drop. A significant drop in your peak flow number and/or asthma symptoms is a signal that you need extra medicine or maybe a short rest during exercise. Ask your health care provider about a written Asthma Action Plan. It will help you know what to do if you are getting worse while you exercise.

A peak flow meter can be an objective way to make decisions about participation in sports, gym class, recess or other activities. In many situations physical education teachers, coaches and employers may be confused about asthma and exercise or physical activity. Some may prohibit people from participation while others may push those with asthma to keep up with their peers without proper monitoring or treatment. A peak flow meter combined with monitoring asthma symptoms can help take the confusion out of this situation.

What Sports Are Best for People with Exercise-Induced Asthma?

Sports or activities with bursts of activity are least likely to cause asthma symptoms. Activities followed by brief rest periods can allow the person to regain control of their breathing. Activities such as baseball, softball, volleyball, tennis, downhill skiing, golf and some track and field events all have brief rest periods.

Sports that require continuous activity like swimming, cycling, distance running and soccer also can be enjoyed by people with exercise-induced asthma. Participation in any sport often requires use of a pre-treatment before exercise and close monitoring. Along with appropriate treatment and close monitoring, a good warm-up and cool-down period are often helpful.

Research shows everyone can benefit greatly from exercise physically and in terms of self-esteem and stress relief. When asthma is well controlled people with exercise-induced asthma should be able to participate in any sport. In fact, it is estimated that exercise-induced asthma affects one in ten athletes. At the 1984 summer Olympic games in Los Angeles, 67 of the 597 members (or 11%) of the American team tested positive for exercise-induced asthma. These 67 athletes won a total of 41 medals!

Visit our website for more information about support groups, clinical trials and lifestyle information.

PTE.054 © Copyright June 1995, 2009

NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.