Asthma is a chronic lung disease with four main features:

- Inflammation or swelling of the lung airways
- Narrowing of the airways due to tightening of the surrounding muscles
- Closing of the airways due to extreme sensitivity to triggers (factors that set off or start your asthma)
- Increased secretion of mucus in the airways and difficulty breathing “out”

Inflammation caused by triggers, if left untreated, may eventually lead to permanent damage. Understanding your triggers and how to manage asthma can reduce the damage caused by inflammation and help you lead a healthier life.

Diagnosing asthma is the first step toward effective treatment. Studies show that up to half of all people who have asthma do not receive proper treatment because they don’t recognize the signs, so they suffer needlessly.

Even though asthma can’t be cured, the risk of future attacks and damage to the lungs can be minimized with proper treatment, including creating and following an asthma action plan (see page 3).
The actual cause of asthma is not known. However, many studies have shown that specific factors can lead to the development of asthma:

- Having a family member with asthma
- Living in a large urban area, which may increase exposure to air pollution
- Smoking and exposure to secondhand smoke
- Obesity
- Exposure to occupational triggers, such as chemicals used in farming, hairdressing, and in paint, steel, plastics and electronics manufacturing
- Respiratory infections, such as a cold, flu or bronchitis
- Low birth weight
- Gastroesophageal reflux disease (GERD), a condition in which stomach acids back up into your esophagus

Triggers vary from person to person. Identifying problem triggers may help reduce exposure and prevent asthma. See "How to Avoid Triggers and Allergens" on page 4 for tips on how to limit your exposure to these common triggers.

Symptoms of Asthma

- Wheezing
- Coughing, especially at night or after running or exercising
- Gasping or sighing
- Chest tightness, shortness of breath or difficulty breathing
- Frequent respiratory infections, bronchitis or pneumonia

Check Your Home

Researchers at Johns Hopkins University found an association between increasing levels of indoor pollution and the severity of asthma symptoms, especially for those who spend a lot of time indoors. Check your home for common sources of indoor air pollution from combustibles, such as oil, gas, kerosene, coal and wood, as well as other substances like asbestos, radon and carbon monoxide.

Asthma is on the rise

Asthma has become an epidemic. According to the Asthma and Allergy Foundation of America, the number of asthma cases has more than doubled in the past 20 years. Several theories exist about why asthma rates have risen significantly during the last two decades, but there probably is no simple answer. While the reasons are not clear, the following factors may contribute to the rise:

- Spending more time indoors where exposure to indoor allergens, such as dust and mold, is greater
- Living in cleaner conditions than people did in the past, which makes our immune systems more sensitive to triggers
- Exposure to increased air pollution
- Decreased physical activity or lack of exercise
- Dramatic rise in obesity may be linked to asthma as well as other health problems
THE EMPIRE PLAN HOME CARE ADVOCACY PROGRAM

The Empire Plan Home Care Advocacy Program (HCAP) covers medically necessary durable medical equipment and supplies prescribed by your doctor. Durable medical equipment covered under HCAP is medical equipment for repeated use and is not disposable, such as a nebulizer, a device that reduces a liquid to a fine spray.

For example, if a doctor prescribes medication delivered using a nebulizer as part of your child’s asthma treatment, call HCAP directly toll free at 1-877-7-NYSHIP (1-877-769-7447) for authorization before receiving the nebulizer. Press or say 1 for the Medical/Surgical Program, then 3 for HCAP. An HCAP representative will help you get the nebulizer quickly through an HCAP-approved provider and with paid-in-full benefits. (Note: The medications used with nebulizers are covered under the Empire Plan Prescription Drug Program.)

If you do not call HCAP for preauthorization or you use a non-network provider, you will pay a much higher share of the cost. For more information on HCAP, see your General Information Book, Empire Plan Certificate, Empire Plan Reports and Reporting On HCAP.

Ask Your Doctor

Updated national asthma guidelines note that treating other common health conditions, such as sinusitis, sleep apnea and depression, may help improve asthma control.

THE EMPIRE PLAN ASTHMA MANAGEMENT PROGRAM

The Empire Plan Asthma Management Program is offered through the Medical/Surgical Program, administered by UnitedHealthcare. It provides guidance and support if you or your dependents are Empire Plan-primary and have been diagnosed with asthma-related respiratory problems. Depending on the severity of your condition, UnitedHealthcare may telephone you or send a letter inviting you to participate in the program. Participation is voluntary, free and confidential.

If you agree to participate in the program, you will receive informational material to help you understand your asthma.

If you are identified as high risk, an asthma nurse case manager will be assigned to answer your questions to help manage your asthma and supply additional informational material. The nurse may help to coordinate care with the doctor treating your asthma, as well as doctors treating any other health conditions you may have.

To find out if you may be considered for the Asthma Management Program, please call 1-877-7-NYSHIP (1-877-769-7447) toll free and press or say 5 for the Empire Plan NurseLineSM. Press 1 to speak to a nurse, available 24 hours a day, seven days a week.

Asthma Action Plan

The National Asthma Education and Prevention Program (NAEPP) emphasizes the importance of learning how to control your asthma. Creating a written, personalized action plan with your physician helps you take control. The goal of an asthma action plan is to reduce or prevent asthma attacks and emergency department visits through day-to-day management. Asthma action plans are unique, so ask your doctor to help you develop one specifically for you that includes information about your daily medications and the severity of your symptoms.
CHILDREN AND ASTHMA

Asthma is a disease that strikes all age groups, but the steepest increase in asthma cases has been in children. Nearly 5 million children under age 18 have had an asthma attack in the past 12 months, while many others have “hidden” or undiagnosed conditions.

According to the American Lung Association, asthma is the number one reason for absences from school and for emergency room visits due to chronic disease. This leads to lost work days for parents and emotional burdens that interfere with the everyday lives of children and families.

Asthma is more prevalent in certain families and is more common in children who also have allergies or eczema, a condition characterized by redness, itching and oozing skin. It is also common in children who are exposed to secondhand smoke, air pollution, dust mites, mold and pets. If you have a strong family history of allergies or asthma, minimize your children’s exposure to these common triggers to prevent them from developing asthma.

If your child has been diagnosed with asthma, call The Empire Plan to enroll in the Asthma Management Program (see page 3). After enrolling, review your child’s asthma management plan with the doctor every three to six months. Don’t change or stop medications unless you are instructed to do so by the doctor, even if your child’s asthma seems to be under good control. With good control, your child’s asthma should not limit activities or slow him or her down. Your child should be able to participate in physical activities and sports and keep up with other children.

Based on information from the American Lung Association

Do children outgrow asthma?

Asthma is what is known as a chronic disease, which means that it usually doesn’t go away once you have it. However, children can still live full and active lives with asthma if they follow their asthma management plan and keep their asthma under control.

HOW TO AVOID TRIGGERS AND ALLERGENS

Although asthma attacks seem sudden, they actually develop over a period of time. One can reduce the chances of an attack by avoiding these common asthma triggers.

TRIGGERS:

Cigarette, cigar, pipe or secondhand smoke
If you smoke, quitting is the most important step you can take to protect your lungs. Talk to your doctor about covered smoking cessation prescription drugs. If you live with smokers, ask them to smoke outside. If they want to quit, ask them to see their doctor. See page 8 for smoking cessation resources.

Cold air or extreme weather
Bundle up on cold or windy days and cover your nose and mouth with a scarf. Stay inside with air conditioning during hot, humid weather.

Exercise and physical activity
If exercise triggers asthma symptoms, your doctor may advise you to use a rescue inhaler. Be sure to ask your doctor how to use your rescue inhaler when exercising.

Emotional upsets, worrying or stress
Use relaxation techniques, such as deep breathing, counting, guided mental imagery, yoga, biofeedback and meditation. See page 8 for resources you can access to help manage stress.

Vapors, gases or fumes
Report these substances in the workplace and safeguard your home with testing kits or inspections.

Perfume and cleaning products
Leave the room. Avoid wearing perfume or being around others who wear perfume. Use unscented and all-natural cleaning products, such as vinegar.

Smog/air pollution
Minimize your driving as much as possible and stay indoors. Go outdoors in the morning hours or after 7 p.m., when ozone levels are low. Keep filters in air conditioners clean.

Certain pain relievers, such as aspirin or products containing aspirin
With your doctor’s approval, take alternative pain relievers.
Sulfites
Always read ingredient labels carefully to avoid foods, beverages and other products with sulfites.

Colds and viruses
Infections linked to influenza (flu), colds and respiratory syncytial virus (RSV) can trigger an asthma attack. Practice thorough hand washing techniques or use a hand sanitizer. Avoid others with colds and viruses, and get a flu shot every year.

In many people, asthma appears to be an allergic reaction to substances commonly breathed in through the air. These substances are known as allergens. The following are substances that could cause an allergic reaction:

ALLERGENS:

Dust and dust mites
Keep your home as clean and dust free as possible. Put mattresses and pillows in airtight covers with tape over the zippers. Replace your pillows at least once every five years. Wash all sheets and bedding in hot water (at least 130 degrees Fahrenheit) once a week. Also, consider replacing curtains with blinds, and carpets with wood floors.

Pollen
During allergy season, consider staying inside at midday and after noon when pollen counts are high.

Molds
Close the windows and doors of your home to keep out airborne or outdoor molds. Fix leaky faucets and pipes to eliminate dampness, which causes mold. If you are not sensitive to bleach, use it to clean indoor surfaces. Use a dehumidifier and keep filters in air conditioners clean.

Feathers
Buy quilts, pillows and cushions filled with man-made fibers.

Animal dander
Keep pets away from your bedroom, furniture covered with fabrics, carpets and stuffed toys.

Cockroach debris
Conduct a pest inspection in your home and treat for cockroaches if necessary. To avoid roaches, use traps and avoid leaving food out.
Nearly 25 million Americans (over 8 percent of adults and over 9 percent of children) suffer from asthma. Fortunately, many effective drugs are available to treat this condition.

Most people with asthma need two kinds of medicine: one for long-term control and one for quick relief.

**Long-term Control/Preventive Medicines**

Inhaled corticosteroids are commonly used for long-term control over persistent asthma. They are inhaled by mouth into the lungs to control swelling and mucus production. Combination inhalers contain an inhaled corticosteroid plus a long-acting beta-agonist (LABA). LABAs are symptom-controllers that help to open your airways.

It is important to remember that inhaled corticosteroids do not stop an asthma attack once it has started and do not immediately relieve asthma symptoms.

Another long-term control medication is a long-acting anticholinergic inhaler, which may be used for persons with asthma and COPD. Anti-inflammatory drugs reduce swelling and mucus production in the airways. As a result, airways are less sensitive and less likely to react to triggers. However, much like inhaled corticosteroids, these drugs do not provide immediate relief.

Other preventive asthma medications include leukotriene inhibitors, MAST cell stabilizers and oral methylxanthines.

**Quick-Relief/Rescue Medicines**

Quick-relief or rescue medications are used to quickly relax and open the airways and relieve symptoms during an asthma flare-up, or are taken before exercising, if prescribed. Quick-relief medications do not take the place of controller medications. These short-acting bronchodilators are available as inhalations, liquids and pills.

Although not usually the first choice of rescue medicines for asthma symptoms, anticholinergics work by opening the larger airways and provide quick relief for those who cannot tolerate short-acting bronchodilators. Anticholinergics are available in inhaled form and can be used alone or combined with bronchodilators.

Your doctor will prescribe the drug that is best for you and your asthma symptoms. If you have side effects from any asthma drugs, be sure to contact your doctor. It is important to know when to use your short-acting rescue inhaler and, if it is not working, to follow the next step on your asthma action plan. Consult your doctor and/or pharmacist to be sure you are using your medications correctly.

**Your Prescription Drugs**

A list of the most commonly prescribed generic and brand-name prescription drugs, including medications used to treat asthma, is available on the Empire Plan Flexible Formulary on the New York State Department of Civil Service Employee Benefits website at www.cs.ny.gov/employee-benefits. After selecting your group and plan, click on Using Your Benefits and then Empire Plan Flexible Formulary. Be sure to check the online Flexible Formulary for updates on which asthma drugs are covered and at what level.

The Empire Plan Flexible Formulary will help you determine if your prescription is for a generic or a preferred brand-name drug. However, this list does not include all the prescription drugs covered under The Empire Plan. **Note:** Medicare-primary enrollees and dependents, refer to the Empire Plan Medicare Rx Formulary list at www.empireplanrxprogram.com, then choose SilverScript.

For specific questions about your prescriptions, please call the Empire Plan Prescription Drug Program toll free at 1-877-7-NYSHIP (1-877-769-7447) and press or say 4 on the main menu.
EXERCISE AND ASTHMA

One of the goals of asthma treatment is to help you maintain a normal and healthy lifestyle, which includes exercise and other physical activities. Following your asthma action plan by taking medications as prescribed by your doctor, avoiding triggers and monitoring your symptoms and lung function will help you achieve this goal. If asthma symptoms prevent you from participating fully in activities, talk to your doctor. A small change in your asthma action plan may be all that is needed to provide relief during exercise or activity.

Activities that involve short, intermittent periods of exertion, such as volleyball, gymnastics, baseball and wrestling, are generally well tolerated by people with symptoms of asthma. Activities that involve long periods of exertion, such as soccer, distance running, basketball and field hockey, may be less well tolerated. Also, cold-weather sports, such as ice hockey, cross-country skiing and ice-skating, may pose challenges. However, many people with asthma are able to participate fully in these activities.

Swimming, which is a strong endurance sport, is generally well tolerated by many people with asthma because it is usually performed while breathing warm, moist air.

Other beneficial activities for people with asthma include both outdoor and indoor biking, aerobics, walking and running on a treadmill.

► Before starting an exercise program, talk to your doctor. He or she will help you decide what activities are best for you. Your asthma action plan will tell you what to do before exercise and if you have symptoms during exercise.

► Always use your pre-exercise asthma medicine (inhaled corticosteroids), if directed by your asthma action plan, before beginning exercise.

► Perform warm-up exercises, and maintain an appropriate cool-down period after exercise.

► If the weather is cold, exercise indoors or wear a mask or scarf over your nose and mouth.

► If you have allergic asthma, avoid exercising outdoors when pollen counts or air pollution counts are high.

► Restrict exercise when you have a viral infection, such as a cold.

► Exercise at a level that is appropriate for you.

Maintaining an active lifestyle is important for both physical and mental health. Remember: asthma is not a reason to avoid exercise. With proper diagnosis and the most effective treatment, you should be able to enjoy the benefits of an exercise program without experiencing asthma symptoms. If you have any questions, talk to your doctor.

*Based on information from the American Academy of Allergy, Asthma & Immunology and the Asthma and Allergy Foundation of America.*

What if I have an asthma attack while exercising?

If you begin to experience asthma symptoms during exercise, stop and follow the instructions in your asthma action plan. Keep your rescue inhaler handy, and use it as directed as soon as you have symptoms. If your symptoms are not getting better, call for emergency medical assistance.
SMOKING CESSATION BENEFITS

People with mild to moderate asthma who smoke cigarettes have worse symptoms, are more likely to go to the hospital with an asthma attack and often have a different type of airway inflammation than nonsmokers with asthma.

Through the Empire Plan Prescription Drug Program, you have access to prescription drugs that can help you to quit smoking. Talk to your doctor about which prescription drug(s) would be appropriate for you. If Medicare is your primary insurance, individual smoking cessation counseling is covered through Medicare.

The Patient Protection and Affordable Care Act covers preventive services, including tobacco use counseling for smokers. For more information, contact The Empire Plan or see Reporting On: Smoking Cessation available on NYSHIP Online at www.cs.ny.gov/employee-benefits. You can also contact the New York State Smokers' Quitline and the North American Quitline Consortium at the numbers listed below.

*Based on information from the American Academy of Allergy, Asthma & Immunology*¹

HELP TO QUIT

For more information on smoking cessation, visit the customized Empire Plan Mental Health and Substance Abuse Program website at www.achievesolutions.net/empireplan.

You have access to educational and supportive articles, as well as resources to help you quit smoking.

RESOURCES

The Empire Plan
1-877-7-NYSHIP (1-877-769-7447)
Press or say 1 for the Medical Program
Press or say 2 for the Hospital Program
Press or say 3 for the Mental Health and Substance Abuse Program
Press or say 4 for the Prescription Drug Program
Press or say 5 for the Empire Plan NurseLine℠
Health information and support 24 hours a day, seven days a week. Then press or say 1 to speak to a nurse.

Allergy and Asthma Network
1-800-878-4403
www.allergyasthamanetwork.org

American College of Allergy, Asthma & Immunology
1-847-427-1200
www.acaai.org

American Lung Association
1-800-LUNG-USA
(1-800-586-4872)
www.lung.org

Asthma and Allergy Foundation of America
1-800-7-ASTHMA
(1-800-727-8462)
www.aafa.org

Centers for Disease Control and Prevention
1-800-CDC-INFO
(1-800-232-4636)
www.cdc.gov/asthma

National Institute of Allergy and Infectious Diseases
1-866-284-4107
www.niaid.nih.gov

National Institutes of Health
301-496-4000
www.nih.gov

New York State Smokers’ Quitline
1-866-NY-QUITS
(1-866-697-8487)
www.nysmokefree.com

Smokefree.gov
1-877-44U-QUIT
(1-877-448-7848)
www.smokefree.gov