

## MEDICAL MONDAYS | News Notes

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**TOPIC: LUNG HEALTH**

AdvancedHEALTH : MidState Pulmonary

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**AdvancedHEALTH is a key sponsor of this year's [American Lung Association's AIR CLIMB on SATURDAY, FEBRUARY 18, 2017 at The Fifth Third Center \(downtown\) at 9am](#). This event is to raise awareness and funds for Healthy Lungs including COPD, lung cancer, asthma and also, air quality. We will be climbing 29 Floors, 638 steps of the Fifth Third Center in downtown Nashville.**

**AdvancedHEALTH would encourage anyone who would like to participate in this year's event to join our Team—AIR AMBASSABORS of MidState Pulmonary.**

### What is COPD (chronic obstructive pulmonary disease)?

[COPD](#) is a [lung disease](#) that makes it hard to breathe. It is caused by damage to the [lungs](#) over many years, usually from [smoking](#).

[COPD](#) is often a mix of two diseases:

- [Chronic bronchitis](#) In [chronic bronchitis](#), the airways that carry air to the [lungs](#) ([bronchial tubes](#)) get inflamed and make a lot of mucus. This can narrow or block the airways, making it hard for you to breathe.
- [Emphysema](#) In a healthy person, the tiny air sacs in the lungs are like balloons. As you breathe in and out, they get bigger and smaller to move air through your lungs. But with [emphysema](#), these air sacs are damaged and lose their stretch. Less air gets in and out of the lungs, which makes you feel short of breath.

[COPD](#) gets worse over time. You can't undo the damage to your lungs. But you can take steps to prevent more damage and to feel better.

### What causes COPD?

[COPD](#) is almost always caused by [smoking](#). Over time, breathing [tobacco](#) smoke irritates the airways and destroys the stretchy fibers in the lungs.

Other things that may put you at risk include breathing chemical fumes, dust, or air pollution over a long period of time. [Secondhand smoke](#) also may damage the lungs.

It usually takes many years for the lung damage to start causing symptoms, so COPD is most common in people who are older than 60.

You may be more likely to get COPD if you had a lot of serious lung infections when you were a child. People who get emphysema in their 30s or 40s may have a disorder that runs in families, called alpha-1 [antitrypsin deficiency](#). But this is rare.

## What are the symptoms of COPD?

The main symptoms are:

- A long-lasting (chronic) [cough](#).
- Mucus that comes up when you [cough](#).
- Shortness of breath that gets worse when you [exercise](#).

As COPD gets worse, you may be short of breath even when you do simple things like get dressed or fix a meal. It gets harder to eat or [exercise](#), and breathing takes much more energy. People often lose [weight](#) and get weaker.

At times, your symptoms may suddenly flare up and get much worse. This is called a [COPD exacerbation](#). An exacerbation can range from mild to life-threatening. The longer you have COPD, the more severe these flare-ups will be.

## LUNG CANCER: Basics

### What Is Lung Cancer?

It's cancer that starts in your lungs and can spread to other parts of your body. Although it's the top cause of [cancer](#) deaths for U.S. men and women, it's also one of the most preventable kinds, by not [smoking](#) and avoiding other people's secondhand smoke.

The disease almost always starts in the spongy, pinkish gray walls of the [lungs'](#) airways (called bronchi or bronchioles) or air sacs (called alveoli). There are more than 20 kinds. The two main types are non-small cell lung cancer and small-cell lung [cancer](#). At first, you may not have any symptoms.

### Non-Small Cell Lung Cancer

Adenocarcinoma is the most common kind of this. It makes up 40% of all lung cancer cases. It mainly happens in people who smoke (or who used to). And it's also the No. 1 type of lung cancer among non-smokers.

More women get it than men. People with this type tend to be younger than those with other kinds.

Adenocarcinoma can spread to the lymph nodes, bones, or other organs such as the liver.

Squamous cell carcinoma usually starts in the lung's largest branches, which doctors call the "central bronchi."

This type accounts for 30% of lung cancers, and it's more common in men and people who smoke. It may form a cavity within the tumor. It often involves the larger airways. It may make you cough up some blood.

Squamous cell carcinoma can also spread to the lymph nodes, bones, and other organs such as the liver.

Large-cell carcinomas are a group of cancers with large cells that tend to start along the lungs' outer edges. They're rarer than adenocarcinoma or squamous cell carcinoma, making up 10%-15% of lung cancers. This type of tumor can grow faster and often spreads to nearby lymph nodes and distant parts of the body.

## Small Cell Lung Cancer

This is the most aggressive form of the disease. It usually starts in the lungs' large, central bronchi. Almost all people who get it are smokers. It spreads quickly, often before symptoms appear. Many times, it spreads to the [liver](#), bone, and [brain](#).

The outlook for someone with lung cancer depends on a lot of things, including what type they have, their overall health, and how advanced the disease is when doctors find it.

## Causes

[Smoking](#) is the biggest reason. It's responsible for about 85% of all cases.

Quitting cuts the risk. Former smokers are still slightly more likely to get it than nonsmokers.

There are also other reasons. Some genetic glitches may put some people at higher risk.

Secondhand tobacco smoke is also a [cause](#). People who live with someone who smokes are 20% to 30% more likely to get lung cancer than those who live in a smoke-free home.

Some other chemicals are risky, too. People who work with [asbestos](#) or are exposed to uranium dust or the radioactive gas radon are more likely to get lung cancer, especially if they smoke.

Lung tissue that was scarred by a disease or infection, such as [scleroderma](#) or [tuberculosis](#), becomes at risk for tumors in that tissue. Doctors call this a scar carcinoma.

Some researchers think that diet may also influence your risk. But that's not clear yet.

## What is ASTHMA?

[Asthma](#) is a chronic disease of the airways that makes breathing difficult. With [asthma](#), there is [inflammation](#) of the air passages that results in a temporary narrowing of the airways that carry oxygen to the [lungs](#). This results in [asthma symptoms](#), including [coughing](#), [wheezing](#), shortness of breath, and chest tightness. If it is severe, [asthma](#) can result in decreased activity and inability to talk. Some people refer to asthma as "[bronchial asthma](#)."

Even though there are seemingly miraculous [treatments for asthma](#) symptoms, asthma is still a serious -- even dangerous -- disease that affects about 26 million Americans and causes nearly 2 million emergency room visits ever year. With proper asthma treatment, you can live well with this condition. Inadequate treatment of the disease limits the ability to [exercise](#) and be active. Poorly controlled asthma can lead to multiple visits to the emergency room and even hospital admission, which can affect your performance at home and work.

There are three major features of asthma:

**1. Airway obstruction.** During normal breathing, the bands of muscle that surround the airways are relaxed, and air moves freely. But in people with asthma, [allergy](#)-causing substances, [colds](#) and respiratory viruses, and environmental triggers make the bands of muscle surrounding the airways tighten, and air cannot move freely. Less air causes a person to feel short of breath, and the air moving out through the tightened airways causes a whistling sound known as [wheezing](#).

(Fortunately, this airway narrowing is reversible, a feature that distinguishes asthma from other [lung diseases](#) such as [bronchitis](#) or [emphysema](#).)

**2. Inflammation.** People with asthma have red and swollen bronchial tubes. This inflammation is thought to contribute greatly to the long-term damage that asthma can cause to the [lungs](#). And, therefore, treating this inflammation is key to [managing asthma](#) in the long run.

**3. Airway irritability.** The airways of people with asthma are extremely sensitive. The airways tend to overreact and narrow due to even the slightest triggers such as [pollen](#), animal dander, dust, or fumes.

## Adult-Onset Asthma

Asthma may occur at any age, although it's more common in people under age 40. According to the Centers for Disease Control, in 2013, 18.9 million American adults, or 8.2% of the adult population, had asthma.

People who have a family history of asthma have an increased risk of developing the disease. [Allergies and asthma](#) often occur together, along with [eczema](#). [Smoking with asthma](#), a dangerous combination, is still seen commonly.

However, anyone can develop asthma at any time, and adult-onset asthma happens frequently. If you have symptoms of asthma, talk to your doctor. If you have adult-onset asthma, your doctor will instruct you in using the [asthma inhalers](#) and other [asthma medications](#) to prevent further [breathing problems](#). Your doctor will guide you on which [medications](#) are for prevention and which medications are meant to "rescue" you if you experience difficulty breathing.

## Asthma Causes and Triggers

People with asthma have very sensitive airways that react to many different things in the environment called "[asthma triggers](#)." Contact with these triggers cause asthma symptoms to start or worsen. The following are common triggers for asthma:

- Infections such as [sinusitis](#), [colds](#), and [flu](#)
- Allergens such as pollens, [mold](#) spores, pet dander, and [dust mites](#)
- Irritants such as strong odors from perfumes or cleaning solutions, and air pollution
- [Tobacco](#) smoke
- [Exercise](#) (known as exercise-induced asthma)
- Weather; changes in temperature and/or humidity, cold air
- Strong emotions such as [anxiety](#), laughter or crying, stress
- Medications, such as [aspirin](#)-sensitive asthma

## Asthma Attack

An [asthma attack](#) is a sudden worsening of symptoms. With an asthma attack, your airways tighten, swell up, or fill with mucus. Common symptoms include:

- [Coughing](#), especially at night
- Wheezing (a high-pitched whistling sound when breathing out)
- Shortness of breath or trouble breathing
- Chest tightness, pain, or pressure

Not every person with asthma experiences the same symptoms of an asthma attack. You may not have all of these symptoms, or you may have different symptoms at different times. Your symptoms may be subtle, such as decreased activity, or lethargy. Your symptoms may also vary from mild to severe from one asthma attack to the next.

## Status Asthmaticus (Severe Asthma Attacks)

Prolonged asthma attacks that do not respond to treatment with [bronchodilators](#) are a medical emergency. Doctors call these severe attacks "[status asthmaticus](#)" and they require immediate emergency care.

## Asthma Diagnosis and Treatment

If you suspect that you have asthma, see your doctor. Your doctor may refer you to an [asthma specialist](#), also known as a pulmonologist. He or she can examine you and run [tests for asthma](#) to determine if you have it.

If an [asthma diagnosis](#) is made, there are many asthma treatments available to relieve your symptoms. And be sure your doctor has given you an [asthma action plan](#). This plan should outline your treatment and medications to be used.