

# 8 Most Common Types of Asthma

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## How Many Different Types of Asthma Are There?

The Centers for Disease Control and Prevention estimate that there are approximately 19 million adult Americans with asthma; this is 7.7% of the U.S. population. There are approximately 6.2 million children with asthma, which is about 8.4% of the children in the U.S. There are different types of asthma, so everyone's condition may be different.

If you were to flip through a patient chart or scroll through an electronic medical record, 6.2% of patients would have asthma listed as a medical diagnosis. However, did you know that there are various types of asthma?

In this article, we cover the different types of asthma which include adult-onset asthma, allergic and non-allergic asthma, eosinophilic asthma and many other common and rare types of asthma.

#### 1. Adult-Onset Asthma

Asthma that is diagnosed after the age of 20 is considered adult-onset asthma.

More than half of all adult-onset patients also have some form of allergy. Others may have some exposure to an irritant at work or in the home that causes the symptoms to present suddenly.

Some adults are more likely to get adult-onset asthma; these adults include the following:

- Women who are undergoing hormonal changes, such as women who are pregnant or menopausal.
- Women who are taking estrogen following menopause for 10 years or longer.
- People who have gastroesophageal reflux disease (GERD).
- Those with chronic allergies, especially if they have an allergy to cats.
- Those who have just suffered certain illnesses, such as colds or influenza.
- People who have long-term exposure to certain environmental irritants such as cigarette smoke, feather beds, perfume, dust and mold.

It does not seem all that much different than asthma diagnosed in childhood, right? However, there are differences. For example, when comparing adults with asthma to children who have asthma, adults have more of a decreased volume of air. This is partially due to aging too, as the chest wall can stiffen.

### 2. Exercise-Induced Bronchoconstriction (EIB)

Remember the term exercise-induced asthma? It has now been replaced with exercise-induced bronchoconstriction because it more accurately described what happens to the lungs. It is not asthma – the lungs constrict temporarily due to a trigger (exercise).

The American College of Allergy, Asthma and Immunology note that upwards of 90% of people with asthma also have EIB, but not everyone with EIB has asthma.

EIB occurs due to dehydration and breathing in dry air. Symptoms can arise minutes after your workout or it may not pop up until after you're done exercising.

Common triggers of EIB include:

- Chlorine from swimming pools.
- Pollution when running or biking outdoors.
- Hot air temperature when doing hot yoga.
- Cold, dry air when ice skating or playing ice hockey.
- · Perfumes, carpeting, cleaning fumes and new equipment in a gym when working out.

If you are someone who suffers from EIB, what exercises are least likely to trigger symptoms? Studies indicate that walking, hiking, recreational biking and sports requiring short bursts of activity may be easiest to do. These may include golf, volleyball, baseball, gymnastics, wrestling, football and short-distance track and field.

#### 3. Allergic Asthma

Allergy triggers exacerbate asthma symptoms. When your body is attacked by a substance that triggers other allergy symptoms, asthma symptoms also occur. Asthma symptoms are most likely to happen when exposed to allergens that are breathed in, such as pollen, mold and dust.

Allergies are tricky; the immune system works hard to keep us healthy. When we have allergies, our bodies are working too hard and are attacking harmless substances, and we call these substances allergens. When exposed to these allergens, our bodies produce IgE antibodies, which stimulate the release of histamine. Histamine's job is to cause swelling and inflammation, thus causing classic allergy symptoms as the body attempts to rid itself of the allergen.

Common allergic asthma triggers include:

- Pollens from trees, grasses and weeds.
- · Cockroach feces.
- Dust mite feces.
- · Animal dander and saliva.
- Mold spores.

Unfortunately, people with allergic asthma may also suffer an asthma attack from other irritants. This means that even irritants that do not cause an allergic reaction may stimulate an asthma attack. So, a person with allergic asthma must avoid many types of triggers. Other triggers may include:

- Tobacco smoke, as well as smoke from candles, fireplaces and fireworks.
- · Dusty rooms.
- · Perfumes and air fresheners.
- Air pollution.
- Cold air.
- Strong chemical odors.

Fortunately, there is a treatment for allergic asthma that may be very helpful. Treatment may include allergen immunotherapy. Allergen immunotherapy is a form of treatment which focuses on decreasing your allergy symptoms.

## 4. Non-Allergic Asthma

A much less common type of asthma, but still just as frightening and uncomfortable, non-allergic asthma is often triggered by temperature extremes and illness, exercise, irritants in the air, stress and certain medications.

Non-allergic asthma, sometimes called intrinsic asthma, often occurs later in life and is more common in females and may be more severe. The cause of non-allergic asthma is not understood, but researchers believe that a combination of environmental and genetic factors likely play a role in the development.

The treatment of non-allergic asthma is the same as any other type of asthma, with the use of long-acting and short-acting inhalers, as well as avoidance of triggers.

#### 5. Asthma-COPD Overlap

Asthma-COPD overlap syndrome, or ACOS, occurs when asthma and chronic obstructive pulmonary disorder (COPD) coincide.

COPD is a collection of diseases – refractory asthma, emphysema and chronic bronchitis. It obstructs airflow and breathing difficulties. Not everyone with COPD has asthma before the development of COPD, and not everyone with asthma goes on to the development of COPD. However, those who have both at the same time are said to have ACOS.

Unfortunately, for people with ACOS, they may not be diagnosed with the COPD portion until later in the disease state. This happens because symptoms of COPD often mimic symptoms of asthma.

Because ACOS is a combination of both asthma and COPD, if not treated appropriately, ACOS can be deadly. According to the American College of Allergy, Asthma and Immunology, "In 2014, chronic lower respiratory diseases – primarily COPD – were the third leading cause of death in the U.S."

#### 6. Eosinophilic Asthma

Eosinophilic asthma is a rare form of asthma, affecting only 5% of people living with asthma. According to Medical News Today, this type of asthma is defined as "...a form of asthma associated with high levels of a white blood cell called eosinophils."

So, what does this mean?

Well, the symptoms are strikingly similar. Inflamed airways occur, as do shortness of breath and an increased in mucus production. However, a dramatic increase in the eosinophil count occurs, which causes further inflammation of the airways, sinuses, nasal passages and maybe even the lower airways.

As the eosinophilic count rises, the symptoms worsen. This specific type of asthma can be challenging to treat and can affect the quality of life.

Other conditions that cause an increase in eosinophil count may be attributed to asthma, but eosinophilic asthma often occurs without allergies. As of now, researchers have not pinpointed what causes the body to produce increased levels of eosinophils in people who have this type of asthma.

Eosinophilic asthma treatment may include the use of biologic therapies and leukotriene antagonists.

#### 7. Occupational Asthma

Occupational asthma is asthma that occurs as a result of exposure to hazards on the job, such as chemical fumes, gas and dust. Those who have allergies or a family history of asthma are more likely to develop occupational asthma, even if they do not have a prior history of asthma.

Over 250 workplace substances have been identified as possible causes of occupational asthma. Here are some

of the more common causes:

- Respiratory irritants: smoke, sulfur dioxide, chlorine gas.
- Animal substances: dander, hair, scales, fur, saliva, body wastes.
- Plant substances: natural rubber latex, cereal, flour, papain, wheat, cotton, hemp, flax, rye.
- **Chemicals:** paint, laminates, soldering resins, varnishes, adhesives, insulation, packaging materials, foam mattresses, upholstery.
- Enzymes: detergents and flour conditioners.
- Metals: platinum, nickel sulfate, chromium.

Avoidance of an occupational irritant is important. Sometimes this is impossible, but care should be taken to minimize exposure if at all possible.

## 8. Cough-Variant Asthma

This type of asthma is tricky to diagnose because often the only symptom is a cough, hence the name. The symptoms that we associate with asthma – shortness of breath, difficulty breathing – are not present.

If your physician tells you that you have a chronic cough – a cough that lasts more than six weeks – ask your doctor about the likelihood of cough-variant asthma. Coughing may worsen with exercise, as well as when exposed to other triggers, such as allergens or cold air.

Cough-variant asthma can occur in any age group, but is most common in children. It can progress to classic allergy symptoms that we are most familiar with. We are not sure what causes this type of asthma, but often it is noticed after an illness because the cough never goes away, or after prescribing medication, such as a beta-blocker.

#### **Asthma Classifications**

In addition to the various types of asthma, asthma can also be classified based on the severity of symptoms. It is classified into four categories based on subjective and objective measures, peak flow measurements and spirometry results.

#### Mild Intermittent Asthma

Symptoms occur less than twice per week, and nighttime symptoms occur less than twice per month. No medications are needed for long-term control of asthma. Lung function is 80% or more above predicted values.

#### Mild Persistent Asthma

Lung function is still 80% or more above predicted values, but symptoms occur three to six times per week, with nighttime symptoms occurring three to four times per month.

#### **Moderate Persistent Asthma**

Symptoms occur daily, with nighttime symptoms occurring over five times per month. These symptoms affect activity and may last for days. Lung function is reduced – less than 80% but greater than 60%.

#### **Severe Persistent Asthma**

Symptoms are continuous, and nighttime symptoms are frequent. Activities are very limited. Lung function is less than 60%.