# Are You Displaying Symptoms of Both Asthma and COPD? It Could be ACOS

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## What Is COPD-Asthma Overlap?

As someone who has had lifelong asthma, I have always been curious about my risk of developing COPD. Is my risk higher than someone who does not have asthma or other breathing difficulties? Or, worse yet, is it possible to have both COPD and asthma at the same time? Here we explore the COPD-asthma overlap.

### Is Asthma a Risk Factor for Development of COPD?

A 2017 study published in Current Opinion in Allergy and Clinical Immunology evaluated childhood asthma as a risk factor for the development of COPD. This study was a longitudinal review and evaluated such studies as the Copenhagen Prospective Studies on Asthma in Children (COPSAC), Manchester Allergy and Asthma Study and the Environment and Childhood Asthma Study in Oslo, Sweden, among others.

It also reviewed various adult cohorts, which did not technically review childhood asthma, but did assess “the association between childhood asthma and adult COPD by using questionnaires regarding the participants’ background and a memory of diagnosis of asthma or episodes of wheeze”.

The main takeaways:

- Dozens of studies show that there is likely a link between childhood asthma and reduced lung function
- Reduced lung function typically is persistent
- Several studies indicate that asthma is likely an indicator for development of COPD

### What Is COPD-Asthma Overlap?

According to the American Academy of Allergy, Asthma, & Immunology, COPD-asthma overlap syndrome is defined as “a chronic respiratory condition which features clinical and biological markers of both asthma and chronic obstructive pulmonary disease (COPD)”.

In order to understand the link, you should also understand each individual condition:

- COPD is characterized by irreversible airflow obstructions due to inflammatory response.
- Asthma is characterized by hyperresponsiveness of the airways and inflammation which leads to reversible obstruction.

The American Lung Association has a much simpler definition: “Asthma-COPD overlap syndrome (ACOS) is diagnosed when you have symptoms of both asthma and COPD. ACOS is not a separate disease, but rather a way for doctors to recognize the mix of symptoms and select a treatment plan that is most appropriate for you”.

## Prevalence of ACOS

So, it may seem that those of us who have had asthma since childhood may have COPD at some point in our lives, but how many of us will go on to develop ACOS?

That number can be a bit tricky to define. Healthcare providers are still trying to define when asthma and COPD overlap, which makes figuring out how many people suffer with ACOS difficult. It also makes it hard to determine how many people will go on to develop ACOS.

Statistical research is slim, but one research study estimates that the prevalence of ACOS is approximately 2% worldwide.

## Symptoms of ACOS

People who have been diagnosed with ACOS will likely experience more symptoms and notice a higher frequency of symptoms. In addition, their lung function will likely be compared to their counterparts who have only asthma or only COPD.

Symptoms may be:

- Wheezing
- Shortness of breath
- Difficulty breathing
- Excess mucus production
- Fatigue
- Frequent coughing
- Having neutrophils or eosinophils in your sputum

If can be difficult to tell the difference between asthma and COPD; those with ACOS will likely have more severe attacks and more frequent hospitalizations. It is important to determine your diagnosis to ensure that a proper treatment plan is devised.

## Causes and/or Risk Factors of ACOS

Researchers are uncertain why some people develop asthma. You are more likely to develop asthma if you:

- Have a family history of allergies or asthma
- Are a smoker or are exposed to secondhand smoke
- Have a personal history of allergies
- Have had respiratory infections as a child

The most common cause of COPD is smoking. Cigarette smoking is the most common culprit, but pipe smoking, cigar smoking and exposure to secondhand smoke are all common causes as well. COPD is also caused by exposure to other lung irritants, such as air pollution, chemicals and cooking fumes. Occasionally, genetic mutations can increase the risk of developing COPD.

Developing both asthma and COPD concurrently is a mystery as ACOS is a relatively newly identified syndrome.

## The Bottom Line

Childhood asthma is, unfortunately, a risk factor for the development of COPD. It is also possible to have COPD and asthma concurrently, which is now called asthma-COPD overlap syndrome, or ACOS.