Learn More About Severe Asthma

What is uncontrolled asthma?
Uncontrolled asthma is when asthma causes symptoms several times per week, requires frequent use of rescue medications, affects sleep, or interferes with activities at work or school. People with uncontrolled asthma have a higher risk for having asthma attacks.

What is an asthma attack?
During an asthma attack (also called exacerbation), the airways in the lung become narrow due to inflammation and constriction of muscles around the airways. Extra mucus is often produced during this time. During an asthma attack, patients experience wheezing (whistling noise in the chest), chest tightness, cough, and shortness of breath.

What is severe asthma?
Severe asthma is a special type of asthma that requires several medications to be controlled, such as high-dose inhaled corticosteroids and at least one other daily maintenance medication. People with severe asthma are often uncontrolled despite these medications and remain at risk for frequent and severe attacks. People that have several asthma attacks every year (2 or more) may also be considered to have severe asthma.

How are asthma and severe asthma are different?
Most people with asthma require only one frequent maintenance medication to be controlled. Patients with severe asthma may require multiple medications (sometime more than five different medications) to manage their asthma. Some of these patients may still have symptoms despite these treatments. People with severe asthma also have frequent asthma attacks and may require oral corticosteroids, like prednisone. Some individuals may require prednisone every day to be controlled. Some of these individuals require a new class of drugs called “biologics.”

What are severe asthma symptoms?
- Daily symptoms: chest tightness, wheezing, cough, and shortness of breath
- Frequent asthma attacks: some might be severe enough to require going to the hospital
- Not feeling well despite using asthma medications as indicated

What subtypes of severe asthma are there?
Within the group of people with severe asthma, some may have higher number of eosinophils (a type of white blood cell) in the blood. This can be determined by a simple blood test. People with severe asthma with high eosinophils numbers often have more frequent asthma attacks and more symptoms. There are available medications that target eosinophils that may decrease symptoms and the number of asthma attacks.

When to see a specialist?
A referral may be considered if asthma symptoms remain uncontrolled despite using inhaled corticosteroids and an inhaled long-acting maintenance bronchodilator, particularly if there is a history of several asthma attacks or use of corticosteroids.

What are the treatment options in severe asthma?
- Oral corticosteroids
- Inhaled corticosteroids
- Inhaled bronchodilators
- Biologics: medications given via injection that treat a unique part of the inflammation that causes asthma

To learn more, go to foundation.chestnet.org/lung-health-a-z/asthma/