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# THE CHANGING ROLE OF INHALED CORTICOSTEROIDS IN ASTHMA MANAGEMENT

ASTHMA

## WHAT ARE INHALED CORTICOSTEROIDS?

Inhaled corticosteroids are medicines you breathe into your lungs with an inhaler to help control the inflammation (swelling) in your airways (the tubes that carry air in and out of your lungs). If you have asthma, taking these medicines may help you prevent asthma symptoms and attacks.

If you have **mild** asthma, your health care provider may have you take these medicines on an as-needed basis to manage symptoms. If you have **moderate to severe** asthma, your provider may have you take these medicines every day over a long period of time to control and prevent symptoms, and you may need to take them consistently for several weeks or longer before you feel better.

## HOW ARE THEY DIFFERENT THAN QUICK-RELIEF INHALERS?

Long-acting drugs such as inhaled corticosteroids are different than quick-relief inhalers. Inhaled corticosteroids treat inflammation in the airways but are only effective over time. Inhaled corticosteroids *do not* deliver quick relief to someone experiencing an asthma attack.

Short-acting bronchodilators (for example, albuterol, levalbuterol, and pirbuterol) can open the airways in minutes and can be lifesaving during a severe asthma flare-up.



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For more information and resources on asthma,  
visit [nhlbi.nih.gov/BreatheBetter](https://nhlbi.nih.gov/BreatheBetter).

## HOW ARE INHALED CORTICOSTEROIDS USED?

Inhaled corticosteroids are typically prescribed for adults and some children with **persistent** asthma. They are usually prescribed together with another drug called a long-acting bronchodilator. Taken together, the drugs relieve inflammation and increase airflow to and from the lungs.

Take inhaled corticosteroids as your provider prescribes and use a spacer or holding chamber with your inhaler to make sure the medicine goes directly to your lungs. Be sure to rinse your mouth out with water after taking these medicines, but don't swallow the water. Rinsing helps prevent an infection in the throat and mouth.



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## FOR CHILDREN AGES 0-4 YEARS WITH PERSISTENT WHEEZING

Your child's health care provider may prescribe a daily inhaled corticosteroid if: your child has had three or more episodes of wheezing triggered by respiratory tract infections since birth or has had two episodes in the past year with no symptoms between respiratory tract infections. In this case, your child's health care provider may prescribe a short (7-10 day) course of inhaled corticosteroids along with an as-needed short-acting bronchodilator (e.g., albuterol sulfate) at the start of a respiratory tract infection.

- Work closely with your child's health care provider to understand your child's treatment plan, how to administer the medicine, and when to start treatment.
- Act quickly when symptoms arise to manage an asthma flare-up.
- Carefully monitor growth with children who use this treatment, because the treatment may affect the child's growth.
- Caregivers can begin inhaled corticosteroids treatment at home without a visit to a health care provider when they have clear instructions.

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## FOR CHILDREN AGES 4 YEARS AND OLDER WITH PERSISTENT ASTHMA

If your child has **mild to moderate persistent asthma** and is already taking daily inhaled corticosteroids, the treatment plan is not likely to change.

If your children's asthma is **moderate to severe**, your child's health care provider may prescribe a single inhaler that combines inhaled corticosteroids and formoterol, a long-acting bronchodilator. This inhaler may be prescribed for daily use to control asthma and as a quick-relief inhaler as needed.

There is no need to change your child's treatment if your child's asthma is under control using an inhaled corticosteroid and a long-acting bronchodilator with a quick-relief inhaler as needed.



## FOR INDIVIDUALS 12 YEARS AND OLDER WITH PERSISTENT ASTHMA

For those 12 years and older with **mild to moderate** asthma, you may benefit from inhaled corticosteroids, with a short-acting bronchodilator for quick relief. Your health care provider might suggest that you use inhaled corticosteroids daily or as needed when your asthma gets worse.

Talk to your health care provider about which approach is right for you or your child. The two approaches (daily or as needed use of inhaled corticosteroids, plus a short-acting bronchodilator for quick relief) do not seem to differ in how they affect asthma control, quality of life, or how often you get asthma flare-ups. Both have few side effects.

For those 12 years and older, whose asthma is **moderate to severe**, your health care provider may prescribe a single inhaler that combines inhaled corticosteroids and formoterol. This inhaler may be prescribed for daily use to control asthma and as a quick-relief inhaler as needed. Formoterol has a rapid onset and can be used more than twice a day if needed.

Your provider may tell you there is no need to change your treatment if you are keeping your asthma under control with the standard pairing of an inhaled corticosteroid and a long-acting bronchodilator, using a quick-relief inhaler as needed.

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