The Oklahoma Institute of Allergy and Asthma

HOW TO USE YOUR INHALER

Metered-dose inhalers

A metered-dose inhaler (MDI) uses an aerosol canister to deliver asthma medication to your lungs. Newer, non-CFC-containing MDIs have been introduced and are available.

To enhance the ability of an MDI to effectively deliver medication to your lungs, a spacer is often used. This short tube, attached to the end of the MDI mouthpiece, holds the medication until you inhale. Spacers help minimize the coordination problems associated with the use of MDI's. The spacer helps more of the medication get down into your lungs rather than just in your mouth.

It may take a little practice to get used to using an inhaler. Before each dose, shake the inhaler gently but thoroughly.

Remove cap: A flexible strap will keep the cap attached to the inhaler, even when the mouthpiece is exposed. If the cap becomes lost, be sure to inspect the mouthpiece for dust, lint, or other foreign objects before using the inhaler
Breathe out: Stand up, or sit up straight. Breath out through your mouth. Place the mouthpiece of the inhaler in your mouth and close your lips around it tightly. (Be sure that your tongue does not block the opening of the mouthpiece.)
Breathe in: Take a slow, deep breath through your mouth, while you press down firmly on the top of the metal canister with your finger.
Hold your breath: Try to continue inhaling after the puff of medicine is delivered. Then try to hold your breath while you count to 10. Remove the mouthpiece and release your finger from the canister before breathing out.
Wait 30 seconds: Most inhaled medications require 2 doses or "puffs." Wait about 30 seconds after your first inhalation before you take the next one. Be sure to shake the inhaler between doses.
Replace cap: Make sure the cap is firmly reattached to keep the mouthpiece clean.
Clean inhaler: Remove the metal medication canister and clean the plastic inhaler and cap at least once a day. Rinse them with warm, running water, and dry both pieces thoroughly. Replace the medication canister with a gentle twist.
Discard canister: Always discard the canister immediately after taking the number of doses specified in the product information included with your inhaler.

Dry powder inhalers (DPI's)

DPI's represent an important alternative to traditional MDIs. This new type of device is breath-activated, using your inspiratory breath (inhalation) to deliver medication to your lungs. This minimizes coordination problems many patients encounter when using traditional MDIs.

Breath-activated delivery technology is available in a variety of devices, each with its own specific instructions for use. Importantly, these devices typically require that you inhale hard and faster than you would with a MDI!!!

PEAK FLOW MONITORING

Peak expiratory flow (PEF) is a measurement of your ability to push air out of your lungs. You can use a simple device, called a peak flow meter, to monitor your own function.

By keeping a regular record of your peak flow results, you can help your doctor make important decisions about your medication and other elements of your treatment plan. Peak flow monitoring is important because it:

- ***Helps you decide when to seek emergency treatment***

- *Allows you to detect the early stages of bronchoconstriction, so you can take steps to remedy the problem.*
- *Gives you an accurate picture of how your condition changes over a 24 hour period; this enables your doctor to determine when medication should be taken.*
- *Helps you see the difference between bronchoconstriction and other causes of breathing difficulty, such as hyperventilation.*
- *Allows you to identify the allergens and other irritants and triggers that cause your asthma symptoms.*
- *Helps you communicate more effectively with your doctor so he or she can provide proper guidance*
- *Shows whether your asthma symptoms have stabilized, improved, or worsened.*

Even young children can learn how to use a peak flow meter. Follow these easy steps:

1. **Place the indicator at the base of the numbered scale.**
2. **Sit up straight, or stand up.**
3. **Take a deep breath.**
4. **Close your lips around the mouthpiece (but keep your tongue clear of the opening).**
5. **Blow out as hard and as fast as you can.**
6. **Write down the number that shows on the scale.**
7. **Repeat these steps 2 more times.**
8. **Write down the highest of the 3 numbers in your peak flow diary.**
9. **Clean the peak flow meter after each use to keep it working accurately.**
10. **Every person will have a different "ideal" peak flow number. Your personal ideal number is the highest number that you can reach during a 2 week period when you're well and are not experiencing any asthma symptoms. Here's how to find yours:**

Take peak flow readings when you wake up and before you go to sleep.
Take additional readings before and after you take your inhaled medication.
Keep track of the results so you can discuss them with your doctor.
Using an Asthma Action Plan

This plan allows you to control the amount of medication you take based on how well you are breathing. Your doctor will make specific recommendations in this plan that need to be followed.

Red zone: Below 50% of your ideal number. This signals a medical alert. Immediately take your short-acting bronchodilator, and then contact your doctor. Most patients who use their asthma action plan faithfully never get into the red zone because they take action before they get into trouble.

Yellow zone: 50% to 80% of your ideal number. The signal for caution. You are experiencing asthma symptoms that require an increase in your anti-inflammatory medication and more frequent use of you short-acting bronchodilator. Follow your asthma management plan and call your asthma doctor to find out how to get your asthma back under control.

Green zone: 80% to 100% of your ideal number. This signals all clear. Continue to take your medications as prescribed.

NOTE: *Peak flows can vary widely from individual to individual and can also vary among different peak flow meters. If you have questions regarding your peak flow, consult your doctor.*