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Guidelines For Using Inhaled Medications - How To Use A Peak Flow Meter

How To Determine Your Child's "Personal Best" Peak Flow

Using a metered dose inhaler is a good way to take asthma medicines. There are less side effects from the medicine because the medicine goes right to the lungs and not to other parts of the body.

It takes only 5 to 10 minutes for the medicine to have an effect compared to liquid asthma medicines, which can take 1 to 3 hours. Inhalers can be used by all asthma patients age 5 and older. The inhaler must be cleaned often to prevent buildup that will clog it and reduce how well it works.

A spacer or holding chamber (see below) attached to the inhaler can help make taking the medicine easier for even younger children. These devices are helpful to people having trouble using an inhaler.

Using the Metered Dose Inhaler (MDI)

1. Remove the cap and hold the inhaler upright.
2. Shake the inhaler.
3. Tilt your head back slightly and breathe out.
4. Use the inhaler as shown in the pictures below. "B" is the best technique to use.
5. Press down on the inhaler to release the medicine as you start to breathe in slowly.
6. Breathe in slowly for 3 to 5 seconds.
7. Hold your breath for 10 seconds to allow the medicine to reach deeply into your lungs.
8. Repeat puffs as prescribed. Waiting 1-2 minutes between puffs may permit the second puff to go deeper into the lungs.

Note: Dry powder capsules (Advair and Serevent diskus) are used differently. To use a dry powder inhaler, close your mouth tightly around the mouthpiece and inhale very fast.



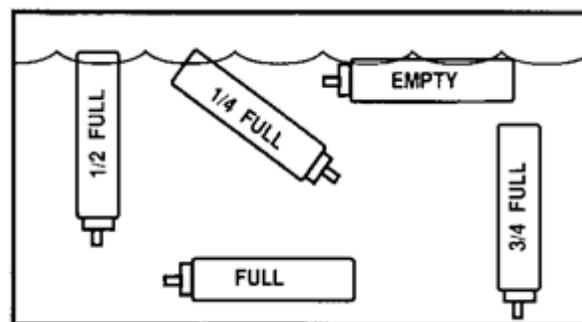
- A. Open mouth technique with inhaler 1 to 2 inches away
- B. Using spacer
- C. Placing directly in the mouth

Cleaning

- Once a day clean the inhaler and cap by rinsing it in warm running water.
- Let it dry before you use it again.
- Have another inhaler to use while it is drying.
- Twice a week wash the plastic mouthpiece with mild dishwashing soap and warm water.
- Rinse and dry well before putting it back.

Checking How Much Medicine Is Left in the Canister

- If the canister is new, it is full.
- An easy way to check the amount of medicine left in your metered dose inhaler is to place the canister in a container of water and observe the position it takes in the water.
- A full canister will sink to the bottom.
- An empty canister will float on the water surface.



Spacers

- Unless you use your inhaler the right way, much of the medicine may end up on your tongue, on the back of your throat, or in the air.
- Use of a spacer or holding chamber can help this problem.
- A spacer or holding chamber is a device that attaches to a metered dose inhaler.
- It holds the medicine in its chamber long enough for you to inhale it in one or two slow deep breaths.
- The spacer makes it easy for you to use the medicines the right way (especially if your child is young or you have a hard time using just an inhaler).
- It helps you not cough when using an inhaler.
- A spacer will also help prevent you from getting a yeast infection in your mouth (thrush) when taking inhaled steroid medicines.

How To Use a Spacer

1. Shake the inhaler well.
2. Attach the inhaler to the spacer (holding chamber) by inserting the inhaler into the back of the spacer.
3. Press the button on the inhaler. This will put one puff of the medicine in the holding chamber.
4. Place the mouthpiece of the spacer in your mouth and inhale slowly. (A face mask may be helpful for a young child.)
5. If you hear a whistle sound while inhaling, you are inhaling too fast.
6. Hold your breath for approximately 5 seconds (or longer) and then exhale.
7. Wait 30 seconds and then repeat steps 3 through 6 if another puff is required.

What Is A Peak Flow Meter?

A peak flow meter is a device that measures how well air moves out of your lungs. During an asthma episode, the airways of the lungs usually begin to narrow slowly. The peak flow meter may tell you if there is narrowing in the airways hours - sometimes even days - before you have any asthma symptoms.

By taking your medicine(s) early (before symptoms), you may be able to stop the episode quickly and avoid a severe asthma episode. Peak flow meters are used to check your asthma the way that blood pressure cuffs are used to check high blood pressure. The peak flow meter also can be used to help you and your doctor:

- Learn what makes your asthma worse
- Decide if your treatment plan is working well
- Decide when to add or stop medicine
- Decide when to seek emergency care

A peak flow meter is most helpful for patients who must take asthma medicine daily. Patients age 5 and older are usually able to use a peak flow meter.

How To Use Your Peak Flow Meter

Do the following five steps with your peak flow meter:

1. Move the indicator to the bottom of the numbered scale.
2. Stand up.
3. Take a deep breath, filling your lungs completely.
4. Place the mouthpiece in your mouth and close your lips around it. Do not put your tongue inside the hole.
5. Blow out as hard and fast as you can in a single blow.

Write down the number you get. If you cough or make a mistake, don't write down the number. Do it over again. Repeat steps 1 through 5 two more times and write down the best of the three blows in your asthma diary.

Find Your Personal Best Peak Flow Number

Your personal best peak flow number is the highest peak flow number you can achieve over a 2- to 3-week period when your asthma is under good control. Good control is when you feel good and do not have any asthma symptoms.

Each patient's asthma is different, and your best peak flow may be higher or lower than the peak flow of someone of your same height, weight, and sex. This means that it is important for you to find your own personal best peak flow number. Your treatment plan needs to be based on your own personal best peak flow number.

To find out your personal best peak flow number, take peak flow readings:

- At least twice a day for 2 to 3 weeks.
- When you wake up and between noon and 2:00 p.m.
- Before and after you take your short-acting inhaled albuterol for quick relief.

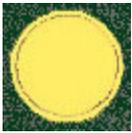
The Peak Flow Zone System

Once you know your personal best peak flow number, your doctor will give you the numbers that tell you what to do. The peak flow numbers are put into zones that are set up like a traffic light. This will help you know what to do when your peak flow number changes. For example:

- **Green Zone** (more than ___ L/min [80 percent of your personal best number]) signals good control. No asthma symptoms are present. Take your medicines as usual.
- **Yellow Zone** (between ___ L/min and ___ L/min [50 to less than 80 percent of your personal best number]) signals caution. You must take a short-acting inhaled beta2 -agonist right away. Also, your asthma may not be under good day-to-day control. Ask your doctor if you need to change or increase your daily medicines.
- **Red Zone** (below ___ L/min [50 percent of your personal best number]) signals a medical alert. You must take a short-acting inhaled beta2 -agonist (quick-relief medicine) right away. Call your doctor or emergency room and ask what to do, or go directly to the hospital emergency room. Record your personal best peak flow number and peak flow zones in your asthma diary.



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This information should not be used as substitute for the medical care and advice of your child's physician. Health related topics found on the Andorra Pediatrics web site should not be used for diagnosing purposes or be substituted for medical advice. As with any new or ongoing treatment, always consult your professional healthcare provider before making any changes in treatment or beginning any new treatment. If you have any questions or concerns, please call our office.