



Family Education Sheet

Metered Dose Inhaler (MDI) and Spacers

What is a Metered dose inhaler (MDI)?

- A MDI is a great way to take your asthma medicine.
- Side effects are usually minimal because the medicine goes directly to your lungs.

What is a Spacer?

- A spacer is a holding chamber that attaches on to your MDI.
- It can help increase the amount of medicine that gets to your lungs.

To use an Inhaler with Spacer, follow these steps:

Inhalers look easy, but may take some practice before you use it correctly.

1. Remove the cap on the inhaler.
2. Shake the canister to mix up the medicine before use. Attach the inhaler to the spacer.
3. Your child should stand up straight and hold their head tilted back slightly.
4. Blow out all the way, slowly, before using the inhaler.
5. Press down on the inhaler. This will put one puff of the medicine in the holding chamber.
6. Immediately place the mouthpiece of the spacer in your child's mouth and have them form a tight seal. Tell him or her to inhale slowly.
7. Tell your child to hold his/her breath for 10 seconds to allow the medicine to reach far into the lungs. You may hold the child's nose closed to be sure that the medication goes into the child's throat.
8. If the dose is more than 1 puff repeat the above steps. Shake the inhaler well before each puff.
9. When finished, remove the inhaler from the spacer and replace the protective cap.
10. Now have your child rinse his/her mouth with water and spit (not swallow). This helps prevent dry throat and mouth and relieve the unpleasant aftertaste.



Cleaning the Spacer

It is important to rinse your inhaler mouthpiece, cap and spacer once a day with warm water to prevent it from clogging and not working well. After rinsing, air dry the spacer. Do not use a towel that will leave lint in the spacer.

What types of Spacers are used with children?

Aerochamber with Mask

Used for children under 5 who cannot take a deep breath on command.

- Ensure the mask makes a tight seal on the face.
- When using the mask, have your child take 6 normal breaths (in and out is one full breath) with each puff.
- Follow the above instruction steps.

Inspirease

Used for children over 5-6 years old who are able to take a deep breath on command.

- Good for parents and children who benefit from visual cues that they are using the spacer correctly.
- Connect the mouth piece to the reservoir bag
- Remove the MDI canister, shake and place on proper place on the mouthpiece.
- Instruct child to blow out until the bag is full.
- Press down on the inhaler to deliver one puff of the medicine
- Instruct child to slowly inhale, **without causing bag to whistle**, until the bag is collapsed
- Instruct child to hold their breath for 5 seconds
- Instruct child to repeat exhaling into the bag, inhaling, and holding their breath for 5 seconds
- Repeat the above directions for each puff your doctor orders.

Aerochamber

Used for children 8 years old and older who are able to take a deep breath.

- Place mouthpiece in mouth, making a tight seal with lips.
- Instruct child to inhale slowly and completely **without making the whistle sound**.
- Repeat above instruction steps.

A ***Spanish*** version of this is available from your provider

Send comments or questions to: Familyed@childrens.harvard.edu
