

Metered Dose Inhaler with Holding Chamber (Spacer) and Mouthpiece

Patient and Family Education

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

What is a metered dose inhaler (MDI)?

A MDI, or inhaler, is a device that contains asthma medicine. It delivers the medicine into the lungs. The MDI needs to be used in a certain way or it will not work.

What is a spacer?

A spacer is a plastic tube with a mouthpiece that connects to the MDI. The spacer helps more of the medicine get into the lungs to help your child.

- If your child uses the MDI without a spacer, a lot of the asthma medicine can stick to the tongue and throat instead of going to the lungs.
- This “wastes” the medicine and decreases its usefulness.



MDI with spacer and mouthpiece

How should my child use an MDI with spacer?

Follow the directions from your child's therapist, nurse or doctor closely. Read the directions on the medicine, MDI and spacer labels carefully before use. Some general guidelines to follow include:

1. Wash your hands well.
2. Have your child sit up straight or stand to use the MDI.
3. Remove the caps from the spacer and inhaler.
4. Shake the inhaler well before using it each time. If it is a new inhaler or has not been used in several days, follow the manufacturer instructions for priming the inhaler.
5. Attach the inhaler to the spacer.
6. Have your child breathe out fully.
7. Place the mouthpiece of the spacer in your child's mouth.
8. Press the inhaler to spray the medicine into the spacer.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

MDI with Holding Chamber and Mouthpiece, continued

9. Have your child take a slow, deep breath from the mouthpiece. Hold it for 5 to 10 seconds, and then, breathe out. Repeat.
10. If your child's doctor has told you to give more than 1 puff, wait at least 1 minute between puffs. Shake the MDI before each puff, and repeat steps 6 thru 9.

NOTE: If your child breathes through his nose when he inhales, have him pinch his nose shut. If he still has trouble, ask his therapist, nurse or doctor about using a spacer with a mask.

How can I keep track of how much medicine is left in the canister?

Many inhalers come with a dose counter. If yours does not have one, be sure to keep track of how much you use. Here are a few ways that may help:

- The best way is to count the number of doses your child uses each day, and mark it on the calendar.
 - Mark what day that you start using a new inhaler on the calendar so you can keep track of the number of doses left.
 - Compare the number of doses used with the number of doses on the canister. Most canisters tell you how many doses it contains.
 - For example, if your child uses 4 puffs each day from a 20-puff canister, get it refilled in 45 to 50 days.
- Place a blank label on the inhaler. Place a "✓" on the label after each puff until you reach the number of puffs listed on the canister label.
- Write a refill date on the canister each time you get a new MDI at the drug store. If your child uses about the same number of doses each day, you'll know to get a refill at the same time each month. This only works if your child does not use the inhaler for extra rescue doses.
- Do **NOT** float your canister in water to see if it sinks or floats. This is **NOT** accurate and may lead to not having medicine when your child needs it.
- Be sure to refill your prescription before the canister runs out. An inhaler never feels like it is getting empty. You must keep up with the number of puffs used, including puffs used to prime the inhaler.

How should I clean the spacer and mouthpiece?

Rinse the spacer and mouthpiece as needed with warm, running water. Clean them once a week with warm water and soap. Allow the spacer and mouthpiece to air dry between uses.

- Do not clean or dry the inside of the spacer with a cloth or fabric. This can create an electric charge on the inside of the spacer. The charge will decrease the amount of medicine that goes to your child's lungs.
- Once a week, rinse the mouthpiece (boot) that holds the canister with warm running water, do not soak it. When placing the canister back into the dried boot, it must be primed with 1 puff.

See the manufacturer's instructions for more information.

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