

HOW TO USE AN MDI WITH A SPACER

Medication is only effective if it is used correctly

MDI's or Metered Dose Inhalers are a convenient way to deliver the rescue or albuterol medications used for sudden symptoms or flares. These are canisters of medication with a propellant gas that delivers the medication as a spray or mist. Depressing or pushing down the medication canister releases a short burst or spray of medicine that is inhaled. It is highly recommended that a spacer or valved holding chamber always be used with an MDI.



Why use a spacer?

- Spacers make it easier for kids to use an MDI. The MDI releases medicine at a very high speed and the patient has to inhale quickly to absorb the mist. When using a spacer, the drug is discharged into the spacer and held there in suspension for 3-5 seconds longer, giving the patient more time to inhale the spray.
- Infants and toddlers are able to use these rescue medicines with a spacer plus a mask.
- Spacers reduce medication side effects like cough or Oral Thrush and help ensure the drug is delivered to the lower airways and not absorbed by the mouth into the stomach.

To use an MDI with a spacer:

1. **Prime** the MDI if it's new or hasn't been used in several weeks (generally, release 2-3 sprays pointing the canister away from the face but follow manufacturer's directions about priming. Some instruct more priming sprays are needed)
2. **Attach** the MDI to the **spacer and shake** the MDI well to mix the medication with the propellant
3. Sitting upright, **exhale** fully (remove gum or candy from the mouth, too) and tilt head back slightly
4. **Seal lips** around the spacer's mouthpiece – no gaps between lips and device
5. Press down on the canister 1 time (= one puff. Never put more than 1 puff in a spacer at a time) to release drug
6. Keep lips sealed around the mouthpiece and **inhale the mist slowly** and deeply about 3-5 seconds
7. **Hold** the breath for 5-10 seconds (a slow count to 5 such as "1 little Indian," "2 little Indians," etc.)
8. **Exhale slowly** through the nose
9. If a second puff is prescribed, wait about 30 seconds and then repeat steps 4-8
10. **Rinse** your mouth with water or brush the teeth to prevent a residual bad taste and to help prevent Thrush



Using the MDI incorrectly; he needs a spacer &/or a mask

Using a spacer correctly



Using an MDI with a spacer + a mask



TIPS:

- Only inhale through the spacer and keep a tight seal around the mouthpiece. You can't see the medicine in the spacer after 3-5 seconds plus the new HFA inhalers have a softer "burst" of medicine, often tasteless, so the only way to know it's done right is to teach the right technique with adult supervision.
- It's imperative to inhale slowly and hold the drug in as long as possible. Be careful not to exhale through the nose while holding in the medication. Infants and toddlers can use a mask with the spacer and MDI. Masks come in different sizes according to age: infant, young child and adult.

To **use a spacer with a mask**, follow steps 1-2 above but also attach the mask to the spacer

1. Place the mask over the nose and under the mouth and make sure there's a good seal with no leaks
2. Press the MDI once to release the drug and inhale the medication from the mask in 5-8 breaths
3. Keep the face mask on during both inhalation and exhalation. Wait 30 seconds then repeat as prescribed
4. Remove the mask, rinse the mouth with water and wipe the child's face to prevent irritation
- 5.

TIPS:

- A child might fight the mask on their face; it may help to make a game of it to let the child get used to the device
- Distracting them with singing, music or watching a video might help
- Ask your healthcare provider, but it may help to use the mask when a young child is sleeping