

HOW TO USE An MDI with a SPACER and MASK

What is a Metered Dose Inhaler?

The metered dose inhaler is one method for giving an inhaled medicine to your child. The medicine is in a pressurized canister with a mouthpiece. Pressing the MDI releases a specific dose of the medication into the air. Many medicines are available in MDI form.

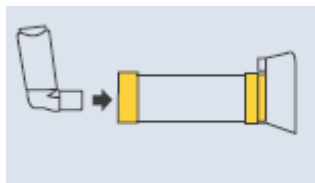


What is a spacer with mask?

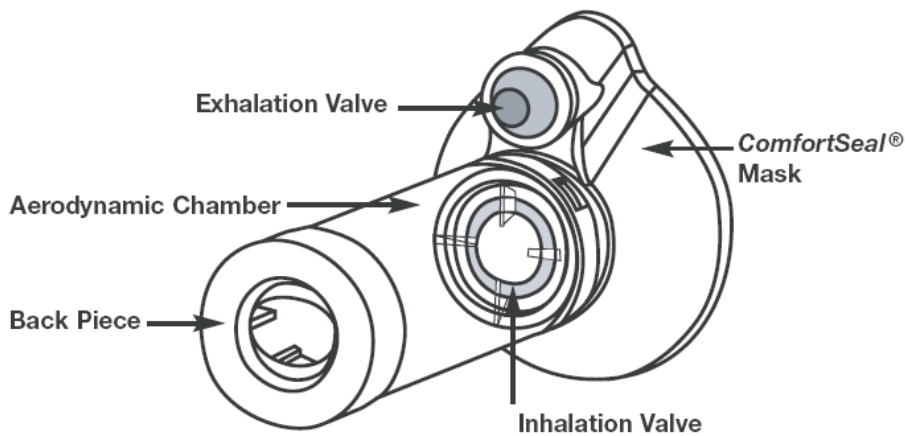
For most children, the MDI delivers medicine most effectively when given through a spacer. A spacer is a general term for an open tube placed between the patient's mouth and the MDI. A VHC (valve holding chamber) is a spacer with a 1 way valve that doesn't allow the patient to breathe back into the spacer. This feature is very important because it allows young children to breathe normally and still get a reliable dose of medicine. The mask that is attached to the spacer fits over the child's nose and mouth and forms a seal. This seal keeps the medicine from leaking out into the air. There are different brand names for VHC's such as Aerochamber, Optichamber and Vortex.

How to give an inhalation:

1. Remove the cap of the metered dose inhaler (MDI) device.
2. Shake the MDI before each use.
3. Insert the MDI into the back piece of the spacer with mask.



4. Apply the mask over the mouth and nose and ensure there is a good seal.
5. Depress MDI once at beginning of slow inhalation. Maintain the seal for six (6) breaths.
6. Repeat Steps 4-5 for the second puff of medication.



This diagram shows one kind of spacer with mask that we commonly use at Duke. Your child's spacer with mask may look slightly different.

Cleaning the spacer with mask:

You should read the instructions from the manufacturer of your child's spacer since instructions may vary. All spacers should be cleaned at least once per week. For most spacers, you should remove the back piece of the spacer; then soak the back piece and spacer for 15 minutes in lukewarm water and liquid detergent. Rinse with clean water and allow it to air dry in the upright position. It is not safe to put most spacers in the dishwasher.

How do you know when your child's MDI is empty?

The only way to know if your child's MDI is out of medicine is to count the doses. Each MDI can deliver a specific number of doses of medication. After the maximum number of doses has been delivered, the MDI is empty of medicine. Even when empty, the MDI may still give out a mist when you press it. In the past, some people have been told to place the MDI in water to see if it is empty. This is no longer recommended. Fortunately, some manufacturers have started to include automatic dose counters with the MDI's. If your child's MDI doesn't have its own dose counter, then you need to count doses so that you know when it is empty.