



MEDICATION ADMINISTRATION FOR COPD, ASTHMA, AND SEVERE ASTHMA

There are different ways to take medicine for COPD and asthma. These can be multiple types of inhalation devices, in addition to medicine that is delivered orally or by injection. You breathe in, or inhale, with these devices. As you inhale, the medicine goes right into your lungs.

We'll review each type of delivery system below:

Pressurized Metered-Dose Inhalers (pMDIs)

A pMDI gives the right amount of medicine to your lungs with each spray or puff. Many pMDIs have a dose counter. This lets you know how many puffs are left.

Pros:

Small and easy to carry; doesn't need a deep, fast breath; dampness doesn't change drug

Cons:

Medication may stick to the back of the throat or tongue; needs shaking and priming

pMDIs With a Spacer

A spacer can be used with a pMDI. It may help to match breathing in with the spray of drug. The medicine you breathe in is sprayed into the spacer. The spacer holds the puff from the pMDI for a few seconds. This means you don't have to both breathe in and spray the pMDI at the same time.

Pros:

Helps get more medicine to the lungs; may reduce the risk of hoarseness or a sore mouth

Cons:

Spacers make pMDIs less portable

Dry Powder Inhalers (DPIs)

A DPI delivers your medicine in a dry powder form. A DPI is activated by your breath. To release the medicine into your lungs, all you have to do is take a deep, fast breath in through the inhaler.

Pros:

Small and easy to carry; you don't need to worry about coordinating your breath at the same time the medication is released; may use single dose capsules of medication so it is easy to tell how many doses are left

Cons:

Needs you to breathe in deep and fast. Not everyone can do that. Medication may stick to the back of the throat or tongue; single-dose models require loading medicine capsules for each use; humidity can cause medication to clump

Breath-Actuated Inhalers (BAIs)

A BAI delivers an automatic spray of medicine when you inhale.

Pros:

Does not require coordination of inhalation and actuation of the canister

Cons:

Larger than a pMDI

Nebulizer

A nebulizer delivers medicine in a fine mist that you breathe in through a mouthpiece or mask that covers your nose and mouth.

Pros:

May be used at any age; is easy to breathe the medicine in; can deliver medications not available in an inhaler

Cons:

Costs more than inhalers; treatment time may be long; parts or tubes may have germs on them; medicine can be wasted when mist comes out from the sides of the mask



Peak Flow Monitor

This is an easy-to-carry, inexpensive, hand-held gadget that is used to measure how much air flows from your lungs when you breathe out one “fast blast” of air. In other words, the monitor shows how forcefully you can push air out of your lungs. You can use the monitor at home and write down the results. Why use a peak flow monitor? The results can help your healthcare provider see if the amount or type of medicine you are taking for your COPD or asthma is working. A peak flow monitor can also let your healthcare provider know if your asthma is getting worse.

IV Infusions or Injections

IV, or intravenous, infusion therapy simply means that a medicine is given slowly through a needle into your vein.

Injections are given with a needle. You can get a subcutaneous injection, which goes under your skin or an intramuscular injection which goes deep into a muscle. You might feel a pinch as your healthcare provider gives you the injection.