

How to Correctly Use Your **ASTHMA DEVICES**

For asthma control, it's important to know how to take asthma medicines correctly. This guide outlines the proper techniques for using asthma devices and equipment, such as metered dose inhalers, spacers and chambers, dry powder and breath actuated inhalers, and nebulizers. It also includes steps on how to clean spacers, chambers and nebulizers.



ASTHMA Care for Adults
Asthma Symptoms, Treatment, Health Management and Activities™

More resources for managing asthma are available in this course: aafa.org/asthmacare



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HOW TO CORRECTLY USE YOUR ASTHMA DEVICES

How Do You Use a Metered Dose Inhaler?

If you use a metered dose inhaler (MDI), it is important to use it the right way. If you use it correctly, the medicine makes it into your lungs to help you manage your asthma. If you don't, the medicine might end up on your tongue, the back of your throat, or in the air. If that happens, you won't get the medicine you need, and you might not be able to control your asthma symptoms.

The National Institutes of Health's guidelines on the treatment of asthma recommend three ways to use an inhaler the right way:

- Get trained again on the right way to use your MDI at every asthma checkup.
- Use a dry powder inhaler or breath actuated inhaler that releases a puff of medicine as you inhale on the mouthpiece.
- If it is hard for you to use an MDI, ask your doctor about other options. There are other types of inhalers that release a puff of medicine as you inhale on the mouthpiece.

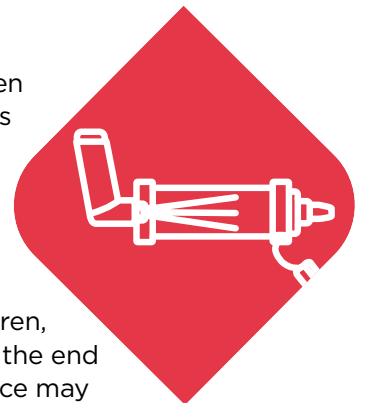
What Is a Spacer or Holding Chamber?

A spacer is a plastic tube you attach to your inhaler to add space between the mouth and the MDI. This lets the medicine break into smaller droplets so you can inhale more.

A valved holding chamber adds a one-way valve to the mouthpiece of the spacer. It traps and holds the medicine, giving you time to breathe all of the medicine in.

Spacers and chambers come in many designs. For adults and older children, the end has a mouthpiece to insert into your mouth. For young children, the end may have a maskpiece to cover the mouth and nose. Your health insurance may cover much of the cost. Some kinds of spacers work better with certain MDIs. Talk with your doctor about the right spacer or holding chamber for you.

Do not use a spacer or holding chamber with a dry powder or a breath actuated inhaler.



How Do You Prime Your Inhaler?

Most MDIs need to be primed when you first open them. They also need to be primed if you haven't used the inhaler for two weeks or more.

Priming the inhaler mixes the propellant and medicine, which makes sure you get the proper dose. It is important to prime your inhaler to make sure you get the right amount of medicine in your lungs with each puff.

To prime your inhaler, remove the cap and shake it well for at least 5 seconds (about 10 hard shakes). Then spray it into the air and away from your face and other people. Repeat as many times as needed according to the directions on the medicine.



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How Do You Use a Metered Dose Inhaler?

How Do You Use an MDI With a Spacer or Holding Chamber?

1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
2. Remove the cap on the inhaler and shake well for at least 5 seconds (about 10 hard shakes).
3. Attach the MDI to the spacer as explained by your health care provider or in the directions that came with the spacer.
4. Place the mouthpiece of the spacer/chamber in your mouth between your teeth and above your tongue and close your lips around it. (Note: Spacers for young children have mask pieces and work differently.)
5. Press down on the top of the inhaler canister. This will put one puff of medicine into the holding chamber. Inhale slowly.
6. Hold your breath for 10 seconds and then exhale.
7. If you need to take more puffs, repeat steps 1 through 7. Your doctor will tell you how many puffs to take. Wait 1 minute between puffs.
8. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
9. If the inhaler was a steroidal (control) medicine, rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

How Do You Clean Your Spacer or Chamber?

Clean your spacer or chamber once a week to remove powder residue and bacteria.

To clean your spacer or chamber:

- Remove the parts that can be removed, like the back piece.
- Soak them in warm water and dish soap for about 15 minutes.
- Rinse the parts in clean water.
- Air dry the parts. Do not dry with a towel.
- Put the spacer back together and use again when all the parts are dry.



Remember, most MDIs work better with a spacer or holding chamber, except for breath actuated inhalers (like a RediHaler™). Breath actuated inhalers use different instructions.



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How Do You Use a Metered Dose Inhaler?

How Do You Use Your MDI Without a Spacer?

It is best for everyone who uses a press-and-breathe MDI to use it with a spacer or chamber. If one is not available, you can use the inhaler directly in your mouth. Try to obtain a spacer/chamber as soon as you can.

1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
2. Remove the cap on the inhaler and shake well for at least 5 seconds (10 hard shakes).
3. Breathe in and out a few times to get your lungs ready. You should exhale before putting the inhaler in your mouth.
4. Put the inhaler in your mouth between your teeth, above your tongue and close your lips around the mouthpiece.
5. Push down once on top of the inhaler to let out one puff of medicine. Release only one puff at a time.
6. Take a slow (3 to 5 seconds) and deep breath in through your mouth.
7. Hold your breath for 10 seconds and then exhale.
8. Relax and breathe out slowly.
9. If you need to take more puffs, repeat steps 1 to 9. Your health care provider will tell you how many puffs to take. Wait 1 minute between puffs.
10. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
11. If the inhaler was a steroidal (control) medicine, rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

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How Do You Use a Dry Powder Inhaler?

A dry powder inhaler (DPI) delivers controller medicine as a powder. It doesn't need an aerosol spray to work.

DPIs are different than press-and-breathe inhalers. DPIs deliver the medicine when you inhale. Some people may prefer a DPI over other inhalers. Children, people with severe asthma, and people who have acute (sudden) attacks may not have enough airflow to use DPI inhalers.



1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
2. Open the cover or remove the cap and hold the inhaler upright. If you are using a diskus, hold it flat, like a hamburger.
3. Load a dose of the medicine into the inhaler by either twisting it or flipping the lever, depending on the instructions.
4. Breathe in and out a few times to get your lungs ready, and then finally breathe out to empty your lungs before putting the inhaler into your mouth. Never breathe into your inhaler.
5. Put the end of the mouthpiece into your mouth between your teeth and above your tongue and close your lips firmly around it.
6. Breathe in fast and hard through the mouthpiece, not your nose.
7. Remove the inhaler from your mouth and close your lips. Hold your breath for 10 seconds and slowly breathe out. This is one "puff."
8. Your doctor will tell you how many puffs to take. To take another puff, repeat steps 1 through 7. Follow your Asthma Action Plan or take medicine as instructed.
9. Wipe off the mouthpiece and replace the cover if it has one. Store your inhaler at room temperature and keep it dry.
10. Rinse your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

Note: Dry powder inhalers DO NOT need a spacer or chamber, to be shaken, or to be primed before each use.



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How Do You Use a Breath Actuated Inhaler?

A breath actuated inhaler is not a press-and-breathe inhaler. When you take a fast, deep breath in, it pulls the medicine out of the device and into your lungs.

There are some that contain controller medicine and some that contain quick-relief medicine. Some people may prefer a breath actuated inhaler over other inhalers. Children, people with severe asthma, and people who have acute (sudden) attacks may not have enough airflow to use breath actuated inhalers.



1. Stand up, if possible. Standing or sitting straight allows your lungs to fully breathe in and out. Hold your head in a normal position, not too far back or forward.
2. Flip the cap or open the cover all the way until you hear a click. This prepares the dose of medicine.
3. Hold the inhaler upright. Be careful not to cover the air vents on the inhaler with your fingers.
4. Breathe in and out a few times to get your lungs ready, and then finally breathe out to empty your lungs before putting the inhaler into your mouth. Never breathe into your inhaler.
5. Put the end of the mouthpiece into your mouth between your teeth and above your tongue and close your lips firmly around it.
6. Breathe in fast and hard through the mouthpiece, not your nose.
7. Remove the inhaler from your mouth and close your lips. Hold your breath for 10 seconds and slowly breathe out. This is one “puff.”
8. Your doctor will tell you how many puffs to take. To take another puff, put the cap back on and repeat steps 1 through 7. Follow your Asthma Action Plan or take medicine as instructed.
9. Wipe off the mouthpiece and replace the cover. Store your inhaler at room temperature and keep it dry.
10. Rinse out your mouth with water and then spit it out. Rinsing helps to prevent thrush or sores in your mouth.

Note: Breath actuated inhalers DO NOT need a spacer or chamber, to be shaken, or to be primed before each use. Do not open the cover unless you are going to use the inhaler.



HOW TO CORRECTLY USE YOUR ASTHMA DEVICES

How Do You Use a Soft Mist Inhaler?

Soft mist inhalers (Respimat™) release medicine through a slow moving, soft mist spray.

Soft mist inhalers need to be primed before the *first time* you use them. Priming gets the device ready for use. Follow your specific device's instructions. They can be found in the patient information paper that comes in the prescription box or on the drug manufacturer's website.

Do not use a spacer or valved holding chamber with a soft mist inhaler, and do not shake before use. When priming and using the inhaler, be careful not to get the spray in your eyes.



How Do You Put a Soft Mist Inhaler Together?

The soft mist inhaler comes in two pieces: the cartridge that holds the medicine and the inhaler that delivers the medicine. You must put the cartridge into the inhaler before you can use it.

1. With the cap closed, press the gray safety catch and pull the clear base of the inhaler.
2. Take the narrow end of the cartridge and push it into the inhaler as far as it will go.
3. Push the cartridge down firmly on a hard surface to make sure the cartridge has gone in all the way. (You will still see a small amount of the cartridge even after you push it in all the way.)
4. Put the clear base back into place.

Do not remove the cartridge or clear base once you have put inhaler the together.

How Do You Prime a Soft Mist Inhaler?

Prime the inhaler before you use it for the first time.

1. Hold the inhaler upright with the cap closed.
2. Turn the clear base in the direction of the arrows until you hear a click.
3. Flip the cap open.
4. Point the inhaler down away from your face. Press the release button.
5. Close the cap.
6. Repeat steps 1 through 5 three more times.

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How Do You Use a Soft Mist Inhaler?

How Do You Use a Soft Mist Inhaler?

1. Hold the inhaler upright.
2. Turn the clear base half a turn in the direction of the arrows until you hear a click.
3. Flip the cap open.
4. Breathe out slowly.
5. Bring the inhaler to your mouth. Keep your head up, looking straight ahead (do not bend your head or neck).
6. Point the inhaler to the back of your throat. Close your lips around the mouthpiece.
7. Press the release button and inhale the mist slowly and deeply.
8. When the spray stops, remove the inhaler from your mouth.
9. Hold your breath for 10 seconds.
10. Exhale slowly.
11. To take another puff, follow steps 2 through 10 (if prescribed).
12. Close the cap.

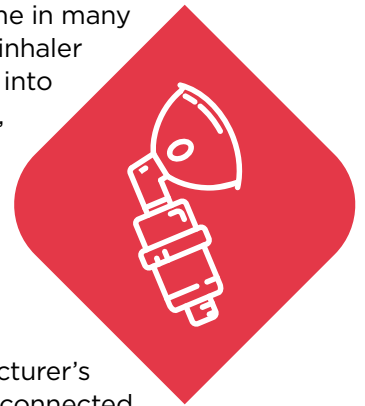


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How Do You Use a Nebulizer Machine?

A nebulizer machine, or “breathing machine,” turns liquid asthma medicine into a mist. You then breathe in the medicine through a mask or mouthpiece. They come in tabletop, portable, and handheld models. If your doctor recommends that you use a nebulizer, it is important to know what your options are and how they work.

Nebulizers may be easier to use than some asthma inhalers. Inhalers come in many shapes and sizes. Each inhaler must be held and inhaled correctly. If the inhaler is not primed and breathed in the right way, all the medicine will not get into the lungs. You do not need to prime a nebulizer or time when you inhale, like with an inhaler. Once the nebulizer is set up and ready to use, simply breathe in and out slowly. The soft mist will get deep into your lungs where it is needed most.



To use a nebulizer:

1. Wash your hands with soap and warm water.
2. Connect the parts of the nebulizer machine according to the manufacturer’s directions. Make sure the tubing and mouthpiece or mask are tightly connected.
3. Pour the nebulizer solution as prescribed into the nebulizer’s medicine cup. Tighten the cap over the cup.
4. Place the mouthpiece in your mouth between your teeth and above your tongue and create a tight seal with your lips. If you use a mask, make sure you have a tight fit over your nose and mouth. Turn the machine on.
5. As the mist starts, breathe in slowly for 3 to 5 seconds. Continue until the mist stops or until there is not medicine left in the cup.
6. Turn off the machine. Rinse your mouth with water and spit it out.
7. Clean and dry the medicine cup and mouthpiece or mask.

To clean your nebulizer:

1. Wash your hands with soap and warm water.
2. Take the nebulizer kit apart. Remove the mouthpiece or mask. Disconnect the tubing from the nebulizer and the medicine cup.
3. Hold the medicine cup and gently twist the top to the left to remove it.
4. Discard remaining medicine in the medication cup. Use fresh medicine each time you use the nebulizer.
5. Rinse all the parts (except the tubing) with hot tap water.
6. Air dry in a clean environment or hand dry using a soft, clean, lint-free cloth.
7. Store the nebulizer kit in a dry bag or clean container to keep them clean and free of dust and germs.

Note: Parts of your nebulizer kit may be reusable while others may be disposable. You can confirm your replacement schedule with your insurance plan or durable medical equipment (DME) provider.



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How Do You Know When Your Inhaler Is Empty?

Inhalers have counters located on the inhaler. The counter tracks the number of puffs or doses left in the inhaler.

The counter may be on the top, bottom, or side of the inhaler. Find the location of the counter when you start a new inhaler.

Some inhalers must be primed before you first use them. Priming gets your inhaler ready for use by making sure the dosing chamber is filled with medicine and propellant (to help the medicine “propel” or spray into the lungs). This ensures you will receive the full dose of medicine.

If you use a metered dose inhaler (MDI) that needs to be primed before its first use, the dose counter will include the number of sprays needed for priming. For example, if your inhaler has 200 puffs and should be primed using four puffs, the counter will start at 204. Four of those doses will be sprayed in the air to prime the inhaler. The inhaler is ready to use when the counter hits 200.

Remember, not all inhalers need to be primed and not all priming instructions are the same. Check your inhaler’s package insert or talk to your pharmacist or doctor.

When the counter reads 0 (zero), there is no more medicine left in the inhaler. You should throw it away. Get your refill before your inhaler reaches 0! Inhalers may still spray even if the counter is at zero. This is because MDIs have both medicine and propellants inside the canister.

Check the counter after each use.

After each puff (dose) you take, check the counter to make sure it is working. By checking the counter after each use, you will know when it’s time to order a new inhaler. On some inhalers, the numbers on the counter will turn red to let you know it’s time to order a new one.

Inhalers may need to be cleaned to avoid clogging. Follow the manufacturer’s instructions on how to clean your inhaler and how often.

Do NOT put your inhaler in water to float it and see if it is empty. This does not work and could cause your inhaler not to work properly.

