

SAFE USE OF INHALERS AND NEBULISERS



This factsheet outlines how to safely use your inhaler, with or without a spacer, or your nebuliser. These tools deliver medication for your respiratory condition.

This factsheet is intended as a reminder for people who have already been shown how to use their inhaler or nebuliser. **It should not replace a discussion with your doctor.**

Key points to remember:

- » Metered dose inhalers provide a dose of medicine when you press the button. They should be used with a spacer if possible.
- » Dry powder inhalers are activated by your breathing, and cannot be used with a spacer.
- » If you use an inhaler without a spacer, rinse out your mouth afterwards to ensure all the medicine has been washed through.
- » Nebulisers turn medicine into a mist you can inhale through a mask or mouthpiece. Make sure your ventilator is on a clean, flat surface in a well-ventilated space.
- » Always check with your doctor if you are unsure about how to use equipment.

For more detail on managing your breathing, you can also check out Chest Heart & Stroke Scotland's booklets on:

Breathlessness

Oxygen Therapy

Pulmonary Rehabilitation

Metered dose inhalers

A metered dose inhaler (MDI) uses a liquid version of your medicine. When you press the button, this mixes with a propellant, and is released in a short jet. This is called a "metered dose" because it releases the same dose of medicine every time you press the button. **MDIs are best used with a spacer, if possible.**

What is a spacer?

A spacer is a hollow plastic tube which fits onto your inhaler. They have a mouthpiece or mask on the other end, which you use to breathe in medication.

Using a spacer helps to ensure that all the medicine goes into your airways, meaning that you get the same dose every time. It also makes it easier to take your medicine, as you do not have to breathe all the medicine in in one go - it collects in the spacer, so as long as you keep your mouth on the spacer, you can keep breathing it in.

There are two ways of using an inhaler with a spacer: **tidal breathing** and **single breath and hold**.

How do I use a spacer for single breath and hold?

- 1. Shake the inhaler** to mix the medicine and propellant. Take the cap off and check that there are no blockages.
- 2. Fit the spacer** onto the uncapped inhaler. If your spacer has a cap, take it off.
- 3. Stand or sit up straight**, and **lift your chin** slightly. This helps the medicine to pass into your lungs more easily.
- 4. Place your mouth over the spacer mouthpiece**, or fit the mask if you have one.
- 5. Press the button on the inhaler**, and at the same time, **breathe in slowly and continuously for 3-5 seconds**.
- 6. Hold your breath for 10 seconds**, or as long as possible, with your lips closed. Then exhale away from the spacer.

How do I use a spacer for tidal breathing?

- 1. Shake the inhaler** to mix the medicine and propellant. Take the cap off and check that there are no blockages.
- 2. Fit the spacer** onto the uncapped inhaler. If your spacer has a cap, take it off.
- 3. Stand or sit up straight**, and **lift your chin** slightly. This helps the medicine to pass into your lungs more easily.
- 4. Place your mouth over the spacer mouthpiece**, or fit the mask if you have one.
- 5. Press the button on the inhaler**, and at the same time, **breathe in and out slowly five times**. Then you can remove your mouth from the inhaler.
- 6. Your spacer should make a clicking sound** as you breathe in and out, as the valve opens and closes.

Regardless of which technique you use, you might need to repeat steps 3-6 if you have been prescribed more than one puff of medicine.

When you are done, remove the spacer from the inhaler. Put the cap back on the inhaler. Wipe the spacer's mouthpiece after using it.

You should take your spacer apart and wash it thoroughly with soap and warm (not boiling) water at least once a month. Your spacer should be replaced once every year or so. If you are not sure how to wash or dispose of a spacer, most of them come with an instruction leaflet. Alternatively, you can ask a pharmacist for advice.

Spacers are safe for children to use, and can be easier as they do not need as much coordination as using an inhaler without a spacer. Usually, children are advised to use the tidal breathing technique, as this is easier to learn and manage - however, you should follow your doctor's advice on what technique to use.

Spacers designed for children are often smaller, as children have smaller lungs.

How do I use a metered dose inhaler without a spacer?

Ideally, you should use a spacer, but if one is not available (for example, if you are on the go), you can use the inhaler on its own.

When you go to take your inhaler:

- 1. Shake the inhaler** to mix the gas and propellant.
- 2. Breathe out** slowly, emptying your lungs as much as possible.
- 3. Place your lips over the mouthpiece** of the inhaler. Try to get as tight a seal as possible. **Lift your chin** slightly, so that your neck is extended. This helps the medicine to pass through your airways better.
- 4. Press the button** on the top of the inhaler.
- 5. Breathe in slowly** and **deeply**. Keep breathing in for 3-5 seconds, if possible.
- 6. If your doctor has told you to**, you may need to **hold your breath** for around 10 seconds (or as long as possible) after breathing in the medicine.
- 7. Rinse out your mouth** when you are done. This helps wash away any medicine that didn't get into your airways. This is especially important with a steroid inhaler, as these can cause mouth problems like thrush if they stay in the throat.

Dry powder inhalers

A dry powder inhaler uses a fine powdered version of your medication, which is released when you breathe in sharply. They do not have a button to press - they are activated by your breath alone. Dry powder inhalers should **not** be used with a spacer.

Some dry powder inhalers come without the medicine loaded. Make sure you know how to load the powder cartridge and how often it needs to be changed. Ask your doctor if you are unsure.

How do I use a dry powder inhaler?

Your doctor will advise you on when to use your inhaler. Some are used at regular intervals, but most are used when you are feeling breathless or have exerted yourself too much.

When you go to take your inhaler:

- 1. Breathe out** slowly. Empty your lungs as much as possible.
- 2. Place your lips over the mouthpiece** of the inhaler. Try to get as tight a seal as possible - tense your mouth around the mouthpiece.
- 3. Lift your chin** slightly, so that your neck is extended. This helps the medicine to pass through your airways better.
- 4. Breathe in quickly** and **deeply**. Keep breathing in until your lungs feel full.
- 5. If your doctor has told you to**, you may need to **hold your breath** for around 10 seconds (or as long as possible) after breathing in the medicine.
- 6. Rinse out your mouth** when you are done. This helps wash away any medicine that didn't get into your airways. This is especially important with a steroid inhaler, as these can cause mouth problems like thrush if they stay in the throat.

Nebulisers

A nebuliser is a specialist machine which turns liquid medicine into a fine mist which you can then breathe in.

A nebuliser has four main parts:

- » **The nebuliser chamber**, a small plastic chamber that holds the liquid medicine.
- » **The air compressor**, which forces air through the medicine. (This is the electrical component, and is not always present)
- » **A length of tubing** which the medicated mist passes through.
- » **A mouthpiece or mask**, which fits to your face to breathe in the mist from the tubing.

Nebulisers are usually used when, for any reason, you are unable to use an inhaler. This might be in an emergency, because you are unable to coordinate your breathing, or because the patient is an infant or very small child.

You should only use a nebuliser on the advice of your doctor. If your doctor does not specifically say you should use a nebuliser, try a handheld inhaler first.

How do I store my nebuliser safely?

If you have a nebuliser at home, it is important to keep it safe and clean to make sure it works as well as possible. Some key points:

- » **Keep it away from water.** Many nebulisers are electrical, and if they get wet, there is a serious fire risk.
- » **Don't store your nebuliser in a dusty or smoky space.** This can clog up the machine and damage it.
- » **Change the filter if necessary.** When you get your nebuliser, ask whether it has a filter, and if so, how and when to change it.
- » **Keep the nebuliser away from children and animals.**
- » **Do not try to modify your nebuliser or fix it yourself.**
- » **Do not put things on the nebuliser**, and be especially careful not to block the air vents.

How do I use my nebuliser?

You should have discussed with your health specialist when and how to use the nebuliser. Make sure you know the plan, and only use the nebuliser at the times agreed with your doctor.

When it is time to use your nebuliser:

- 1. Put your nebuliser on a clean, flat table surface.** Never use your nebuliser on carpet or fabric, as fibres can get pulled into the machine and damage it.
- 2. Use your nebuliser in a well-ventilated space.** Open a window if possible.
- 3. If you are using a mask, make sure the mask fits.** The mask should fit closely to your face all along its edge. Make sure it is secure, but not too tight, and that the top edge is sealed against your cheeks and nose.

If you are using a mouthpiece, put your mouth around it and press your lips tightly against the mouthpiece to make a tight seal.

- 4. Sit as straight as you can. Breathe normally for 10-15 minutes.** If you are using a mouthpiece, make sure you breathe through your mouth rather than your nose.

Once you are done, it is important to clean your nebuliser after each use:

- 5. Wash your hands** thoroughly, using warm water and soap.
- 6. Disconnect the four parts of the nebuliser** (chamber, compressor, tubing, and mouthpiece/mask)
- 7. Wash each part** in warm, soapy water. Rinse with clean water.
- 8. Shake off excess water and leave the pieces to air-dry.** Do not try to use a cloth or towel to dry the inside of the nebuliser. Make sure the nebuliser is completely dry before putting it away.



CHSS have a range of instructional videos on YouTube, including:

[Using a Spacer](#)

[Using the Spiromax](#)

[Using an Easi-Breathe inhaler](#)

[Using an Accuhaler](#)

[Using a Turbohaler](#)

You can also go to our website for information, advice, and support: www.chss.org.uk

Find a range of easy-to-read booklets and factsheets at our resources hub: www.chss.org.uk/resources-hub

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