

nebulisers

Nebulisers convert liquid medication into a fine mist or vapour so it can be breathed in through a mouth piece or mask. Only some people with asthma and other respiratory illnesses need a nebuliser pump. Nebulisers are generally used for the elderly, the very young, in acute attacks and for severe asthma.

There are two types of nebulisers:

- Jet nebulisers pass compressed air through the medication to convert it to a mist
- Ultrasonic nebulisers pass ultrasound waves through the liquid medication to convert it to a mist

There are a number of different nebuliser pumps available that can run from either mains power, a car cigarette lighter or battery. Factors to consider when buying a nebuliser pump include:

- Severity of the asthma
- Frequency of nebuliser use
- Type of medication being nebulised
- Medication chamber (bowl) being used
- Number of people using the pump
- Where the pump will be used

Discuss your needs with a respiratory educator at the Asthma Foundation of SA.

Children under the age of 5 using a nebuliser should use a face mask rather than a mouth piece. Some medication can also irritate the eyes. For example *Atrovent* may irritate glaucoma and *Pulmicort* may irritate cataracts. This irritation can be prevented by using a mouthpiece, covering the eyes with a face washer or wearing swimming goggles when using the nebuliser.

Medication chambers/ bowls

Some medications such as *antibiotics* and *Pulmozyne* when used via a nebuliser need to be delivered through specific medication chambers/ bowls such as *PARI* and *Ventstream*. These chambers are breath activated and deliver the drug only on the in-breath. This increases the amount of drug reaching the lungs. Filters can also be added

to ensure that *antibiotics* are not released into the atmosphere. Nebuliser pumps need to be matched to the special medication chamber/ bowl to ensure maximum drug delivery.

How to use your Jet Nebuliser

1. For your jet nebuliser to work properly you must have the following items: a pump, a nebuliser bowl (which consists of 3 pieces), tubing, a mouthpiece or mask, and the correct medication to put into the nebuliser bowl.
2. Plug the electrical lead into the wall. If using a battery-operated nebuliser pump, ensure the battery is adequately charged before use. If using the car cigarette lighter connection, plug into the lighter socket.
3. Unscrew the top from the nebuliser bowl. Squirt the medication into the bowl by either breaking the top off the nebule and squeezing into the nebuliser bowl or drawing the required amount from the medication bottle with a syringe.
4. Screw the top back on the nebuliser bowl.
5. Attach one end of the tubing to the bottom of the bowl and the other end of the tubing to the pump outlet.
6. Place the mouthpiece or mask onto the top of the bowl. If using a mouthpiece, place the mouthpiece in the mouth and seal lips firmly. If using a mask, place over mouth and nose and secure elastic straps over head. Turn the pump on.
7. Sit in a comfortable upright position.
8. Breathe normally through your mouth with both mouthpiece and mask.
9. It should take approximately 7-10 minutes for the medication to go through the nebuliser. You will know the dose is finished when you hear a spluttering sound and a mist is no longer being produced. There will always be some residual fluid left in the bowl. Turn off the pump.

10. Detach bowl and separate into its three pieces. Rinse the mouthpiece/ mask pieces in warm water and leave to air dry. Some bowls need to be boiled weekly. Check and follow manufacturers' instructions.
11. Once the bowl and mouthpiece/ mask are completely dry, store in an airtight container. When the pump has cooled, pack it away.

Ultrasonic nebulisers

Ultrasonic nebulisers are smaller than jet nebulisers, quieter to use and are hand-held. Some units will struggle with thicker medication solutions and so should be operated as per the manufacturers' instructions. Pay close attention to:

- How to fill the medication chamber
- How to hold the unit vertically
- How to clean the unit when the medication dose is finished

Looking after your nebuliser

- Nebuliser pumps need servicing yearly. Check the operator's manual which comes with the pump for its service details or ring the Asthma Foundation of SA to find your nearest location.
- Nebuliser bowls need to be replaced regularly, some every 1 to 3 months. It is wise to write down the date when the bowl was first used and record how long it took for the dose to finish. As the bowl wears out, it will take longer to deliver the dose. If this happens or it mists poorly, replace the bowl.
- Nebulisers have filters that need to be replaced regularly, usually every 3-6 months. Read your operator's manual which comes with the nebuliser.
- Never wash or rinse tubing
- Operate nebuliser on a clean, firm surface like a table.
- Keep a spare bowl

Purchasing a Nebuliser from the Asthma Foundation of SA

Nebulisers can be purchased from the Asthma Foundation of SA. A doctor's letter is not needed for general nebuliser purchases unless you wish to claim your purchase through your private health care provider. It is preferable to ring and make an appointment with an educator to assist you in your purchase.

Purchases using Private Health Insurance

The Asthma Foundation of SA has an agreement with Mutual Community and SGIC for nebuliser purchases using Extras Cover.

To purchase a nebuliser using Extras Cover from the Asthma Foundation of SA and organise approval through your private health insurer, first speak with an educator. You will need a doctor's letter stating that a nebuliser is required for medication delivery.

Hire of nebulisers

The Asthma Foundation can also provide information on where people can hire a nebuliser.

Know how to use a spacer

A puffer and spacer is just as effective as a nebuliser in delivering asthma medications. Puffers and spacers have the added advantage of being totally portable and much quicker in delivering medications. In case of power failure, it is advisable to have a puffer and spacer on hand.

For more information contact the Breathe Better Health Line 1800 645 130, go to www.asthmasa.org.au or visit the Breathe Better Centre at 300 South Road Hilton.