



Home Nebuliser patient instruction sheet - Antibiotics

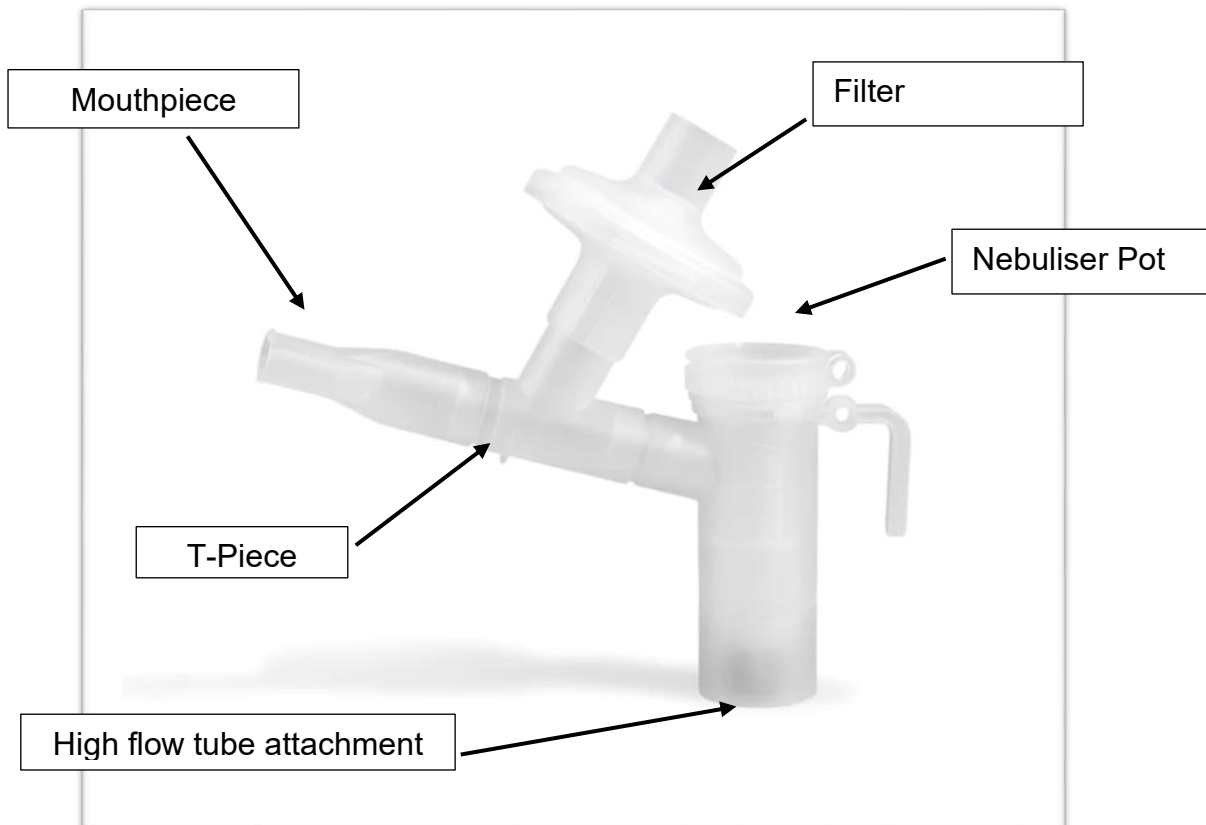
What is a compressor and how does it operate?

A nebuliser is a small air compressor that converts a liquid medication into an aerosol or mist that can then be inhaled. You have been prescribed nebulised antibiotics for your chest condition. Nebulised antibiotics can be beneficial for patients with persistent chest infections who do not respond to oral antibiotics. Research has shown us that this is the optimal way to give your medication, as the drugs are delivered directly into your airways. This medication can only be prescribed following an assessment performed at hospital, to ensure that the medication does not have any side effects.

Equipment

All air compressors provided will be mains operated and are suitable for UK voltage of 220-240V. The department currently hold different types of air compressor. Each nebuliser is suitable for the administration of antibiotics (minimum flow rate of 6L/min) and the type of compressor issued will depend on current stock availability.

The compressor will be issued with a nebulised antibiotic kit called pari filter kit, comprising of:



- Sharps bin
- 5ml syringe
- Green Sterican needles to draw up the antibiotic

How to use the nebuliser

This information is designed to support the advice provided at the time of nebuliser issue.

Safety advice

- Do not immerse the compressor machine in water
- Never leave the compressor unattended when plugged in and operating
- Use only with prescription medication
- Do not use more frequently than prescribed
- Never use the compressor if the plug or electrical cord is damaged/faulty
- Keep away from sources of heat
- Do not use if you are feeling drowsy or sleepy

Operational instructions

Setting up your nebuliser:

Ensure the nebuliser is positioned near a window that can be easily opened and near a plug socket. The aerosol hose within the nebuliser kit needs to be positioned outside an open window as this acts as an exhaust, ensuring no antibiotic is exhaled in the room, is safe for other people and prevents stains to furniture.

- Check the electrical cord and plug are not damaged
- Connect the plug to the mains power supply
- If the electrical cord is not integrated into the compressor unit, push the cable into the mains socket of the nebuliser
- When you are ready, turn on using the on/off switch (position I is on, position O is off) to check the compressor is working

Preparing the medication and filling the nebuliser chamber

Always check your medication and expiry dates before using

1. Wash your hands, and always work on a clean surface
2. Prepare your medication - check the drug and the expiry date
3. Assemble the antibiotic kit
4. Assemble the needle and syringe ready to draw up the medication. Your specific antibiotic, diluent and instructions are provided below:

Medication

Prescribed drug: _____

Diluent: _____

Total syringe volume to be nebulised: _____

Instructions:

1. Unscrew the top from the chamber and ensure all parts of the chamber are intact
2. Carefully add the prescribed solution to the nebuliser chamber



3. Replace the cap and screw down firmly
4. Attach one end of the high pressure tubing onto the bottom of the chamber, taking care not to tip out the contents. Attach the other end of the tubing onto the outlet on the compressor
5. Place the mouthpiece onto the front of T-piece and filter on top of the T-piece, as instructed

Receiving the medication

1. Sit comfortably, with the mouthpiece in your mouth
2. Switch on the compressor and breathe normally. Ensure the chamber is in an upright position at all times. Swallow any saliva produced
3. Refrain from holding a conversation during the therapy delivery and ensure no one smokes in the vicinity
4. You may switch off the compressor if you need a rest during the therapy
5. The therapy should take approximately 10-15 minutes to complete. Tap the nebuliser chamber during delivery; if there is no more mist, the treatment is finished

Cleaning and maintenance

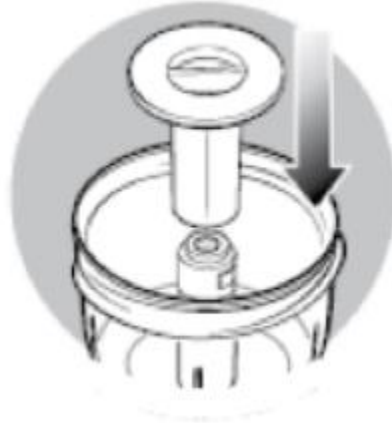
- The compressor must be kept clean and dust free
- Replace the filter pad after each use
- Disconnect from power supply before cleaning
- Wipe the machine regularly with a damp cloth and clean any spillages immediately
- Periodically check the plug and electrical lead for damage
- To ensure your compressor works optimally and provides the greatest benefit, please follow the cleaning advice below:

The equipment must be kept clean and dry to minimise the risk of chest infections

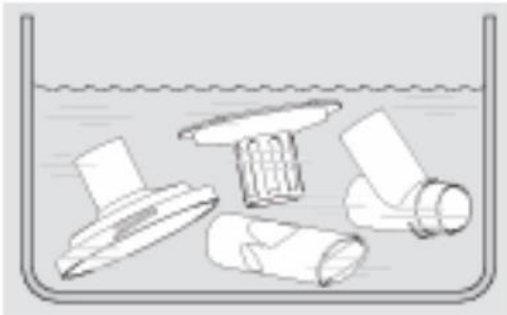
Every day

- Dismantle nebuliser kit:
- Unscrew the two halves of the medication pot and remove the mouthpiece and T-piece

Note: Do not lose the baffle that sits inside the bottom half of the medication pot



- Wash the mouthpiece, T-piece and medication pot and filter case with warm soapy water (**do not immerse the tubing in water**)



- Rinse thoroughly with water

Drying

- Shake the water out of all of the parts
- Place all parts on a dry, clean and absorbent surface and allow the to completely dry.
- Run the nebuliser with just the tube attached for 10 seconds to remove any residual fluid

Every week

- Wipe inside and outside of the compressor casing and corrugated tube with a damp cloth to remove any marks
- Dismantle the nebuliser kit and wash with hot soapy water and rinse thoroughly
- Immerse in cold Milton solution (prepared as per manufacturer's directions) for 30 minutes.
Note: do not boil nebuliser pots/mouthpieces
- Rinse thoroughly in water and leave to air dry

Filters

The air filter should be checked on a regular basis. If these become dirty or blocked, the compressor may not operate properly. Once the filter is no longer clean, it will need to be replaced (approx. every three months). You will be shown how to check and change the filter for your machine when issued with the nebuliser and provided with spare filters. Please contact the department for any further advice.



Travel nebulisers

Important: Travel nebulisers are not suitable for nebulising antibiotics, but may be loaned if you take bronchodilators, for example salbutamol.

The department also has a limited supply of travel-sized nebulisers with a battery available for loan. These are ideal for taking on holiday and can be operated directly or charged using the car 12V port or the mains. Travel nebulisers must be booked in advance and it is strongly recommended to provide as much notice as possible of the dates required, particularly during peak holiday times. Please contact the department for further details or to book a travel nebuliser.

Servicing

If the compressor is not performing correctly or you are having any issues with the device please contact the department to discuss this further or arrange an appointment.

Troubleshooting

The compressor does not run:

Check that the main lead is connected to the nebuliser
Check that the plug is in the socket and the power is on
Check the filter – replace if required

The compressor is running but makes only a little mist:

Clean the medication chamber and mask/mouthpiece as directed in the 'cleaning and maintenance' section, if this does not work, try a new medication chamber.

The compressor is running, the medication chamber bubbles but makes no mist:

Clean as directed in the 'cleaning and maintenance' section

Help and advice

Should the nebuliser make an unusual noise or take a longer than 15 minutes to deliver the medication, please contact the department to arrange an appointment to replace the faulty nebuliser. Please call the Lung Function and Sleep department on **0121 371 3870**. We are open from Monday to Friday between 09:00–17:00.

We do not provide an out-of-hours service. If your nebuliser fails to provide the usual relief or you are experiencing side effects, you should seek urgent medical advice from your GP or contact your out-of-hours service provider.

Lung Function and Sleep

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Accessibility

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