

Sleep Centre

Non-invasive ventilation (NIV)

Information for patients, relatives and carers

Introduction

This is a guide to your non-invasive ventilation (NIV) machine. It contains some instructions, troubleshooting and advice that will support you throughout your therapy. We hope it will answer some of the questions that you or those who care for you may have. This booklet is not meant to replace the discussion between you and your care team but aims to help you understand more about what is discussed. If there is anything that you do not understand, please speak to your care team

What is NIV?

NIV is designed to support your breathing in a minimally invasive manner. Normally we breathe in oxygen and breathe out the waste gas, carbon dioxide. However, people with certain health conditions, for example, chronic obstructive pulmonary disease (COPD) or obesity, can have difficulty getting enough air in and out of their lungs. This can lead to a build-up of carbon dioxide in the blood. This has symptoms such as headaches and sleepiness. If left untreated, this build-up can be harmful.

How NIV works

Your NIV machine is connected by a tube to a cushioned mask that sits fitted over your nose and mouth, or just your nose.

The machine provides a variable pressure of air through the mask to help support your breathing, reducing the effort on your breathing muscles.

The pressure helps remove carbon dioxide, increase your oxygen levels, and can ease symptoms of breathlessness.



When to use NIV

You should use your NIV machine whenever you sleep – every night and for short naps during the daytime. Set it up on a bedside table.

My NIV Settings

IPAP _____

EPAP _____

Mask type and size _____

Always bring your NIV machine, tubing and mask to every sleep appointment and if you are ever admitted to hospital.

Setting up your machine

1. Slide up the safety catch on the power outlet at the back of the machine.



2. Insert the power lead and push the safety catch back down (this stops the lead from being pulled out by mistake).



3. Push the elbow connector onto the air outlet at the back of the machine, making sure it points towards where you sleep.



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4. Attach one end of the tubing to the elbow connector and the other end to your mask.



5. Fit your mask according to the instructions given by the sleep centre team or community nurse (see below).
6. Start the air pressure by pressing the button at the top.



How to fit your NIV mask

Your mask will be fitted for your face by our clinical team.

It is important you do not share your mask with anyone else for hygiene reasons.

1. Clean, wash and dry your face before putting on your mask. Avoid face creams as these can damage the mask and cause air to leak.
2. Position and place the mask over your face in the position advised and hold it there while doing up the straps. Take care not to drag the cushion down your face when fastening the straps.
3. Turn on to start the air pressure by pressing the button at the top.



4. Adjust to get a good seal. The cushion of the mask needs to inflate against your face and the mask should feel comfortable with no air leak around your eyes. It is common to have a small amount of air leak from the bottom of the mask. Adjust the straps so that one finger can slide under the cheek straps. It is good practice to adjust the headgear in front of a mirror, to ensure you are tightening and loosening the straps evenly.



5. The most common mistake is to fit the mask too tightly, especially over the nose bridge, which can cause discomfort, bruising and pressure sores.



Caring for your NIV machine and mask

It is important that you regularly wash the mask and attachments to keep them clean.

Attachment	When to clean	How to clean
Mask	Daily	Handwash with dishwashing soap and warm water. Leave to air dry.
Head strap and Tubing	Weekly	Handwash with dishwashing soap and warm water. Hang up to drip dry.
Machine	Weekly	Unplug from power and wipe with a damp cloth. Air dry before plugging back in and turning power on.
Filter	Replace every three months	Do not wash the filter. Check regularly for dust and flick the filter to remove the dust. Replace filter with a new one every three months. The Sleep Centre will provide you with spare filters.

- Please do not use hot water or dry attachments near a heat source, such as a radiator.
- Do not put the attachments in the dishwasher, washing machine or tumble dryer.
- Do not use anti-bacterial wipes or scented soaps as these can damage the products.

Troubleshooting

Machine not working properly:

NIV machines are usually very reliable but if you think yours is not working properly, please stop using it and contact the Sleep Centre or community nurses (below). Never try to repair the machine or mask yourself. Do not make any changes to the mask.

Mask fit problems:

If you are getting large leaks into your eyes or sores developing on your nasal bridge, contact the Sleep Centre for advice on fitting the mask.

Travel advice:

If you need to take your NIV machine on holiday, we will provide you with a letter explaining its use to the airport and airline. Please contact the airline in advance, as you will need to take your NIV as additional hand luggage, to prevent damage.

Further information about your NIV device can be found on the My Air Website. You can sign up for free at myAir.resmed.eu.

Useful contacts

<p>Sleep Centre (Charing Cross Hospital)</p> <p>Opening hours: Monday to Friday, 09.00 – 16.00</p> <p>Tel: 020 3311 7188</p> <p>Email: imperial.sleeplab@nhs.net</p>	<p>Lung Function (St Marys' Hospital)</p> <p>Opening hours: Monday to Friday, 09.00 – 17.00</p> <p>Tel: 020 33126022</p> <p>Email: smhlungfunctionlab@nhs.net</p>
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For Hammersmith and Fulham Community patients, please contact your community nurse.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:

imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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