



Non-invasive Ventilation (NIV) patient settings leaflet

Please keep this leaflet with your machine as it contains useful information about your treatment. This will be very useful if admitted to hospital or you become unwell.

Your treatment is managed by the Lung Function and Sleep team at Good Hope Hospital.

Opening times: The department is open Monday–Friday (09:00–17:00). The department is not open on Bank Holidays. An answer phone is available for out of hours.

Contacting the department: you can contact the department by telephone: **0121 424 7229**

Making an appointment: please contact the department to arrange an appointment.

If it is a weekend, and you have an issue with your NIV mask or machine, we recommend that you wait until Monday morning, at which point you can contact the lung function department. If you feel that you need to speak to someone sooner, you could ring the Good Hope Respiratory Ward (W24) on **0121 424 7224** (between Saturday/ Sunday 08:30–16:30) and ask to speak to a physiotherapist about your NIV treatment. The team may not always be able to help, but may be able to offer advice.

Non-Invasive Ventilation (NIV)

NIV is a treatment to help with your breathing. It involves wearing a mask connected to a machine that makes breathing in and out easier and provides support for the muscles that make your lungs work. It is generally worn at night during sleep, but for some may also be used in the daytime.

The mask provided has been selected to fit your face and the machine has also been specifically set to aid your breathing. You will have been issued with the following equipment:

- Machine (with power lead)
- Filter
- Hose
- Mask (with headgear)
- Carrying bag

How often do I need to use NIV?

When you are set up with NIV you will be advised when to use it. This is typically between 6–8 hours per night, every night. Some patients may be advised to use NIV in the daytime as well. If NIV is not regularly worn or is worn for less than the recommended duration it is unlikely to be effective and you may become unwell.

Benefits of NIV

NIV can improve sleep quality leading to better energy and concentration levels during the day. It can also help you feel less breathless than before. This may mean you may be able to perform more daily tasks. You may also feel brighter on waking and headache free if this was a problem previously. It can also decrease the likelihood of being re-admitted to hospital.

Useful information

How to switch the machine on and off

Lumis

Connect the cable into the power inlet on the rear right hand side of the machine. Please be aware that the surround of the power connection has a retention clip that locks the power cable into place if pressed down. The retention clip can be lifted upwards in order to unlock the power cable for easier transport. Plug the machine into the mains and it will automatically come on and the screen will light up.



At the rear of the machine is the air outlet, where you attach an external filter (supplied by department) and onto this filter attach the hose from your mask.

To switch the machine on or off simply press the Start/Stop button once which is located on top of the device.

Once the device has been running for a few minutes all lights on the machine will go off but pressure will still be delivered.

Stellar

Plug in the mains cable and switch the machine on using the black rocker switch on the rear of ventilator (on the left hand side). To start the machine press the power button (flat one on the top). To stop the machine, press the flat power button and then confirm by pressing the raised silver button.

Remote monitoring

Some NIV devices allow the Lung Function and Sleep team to access the data on the machine even when you are at home. We can use this to offer advice when you call us with a problem with your NIV therapy, or when you undergo a review over the telephone.

If your machine breaks down, or if you think there are problems with your treatment, we would not know about this unless you contact us. If you experience issues with your NIV equipment, you must contact the department as soon as possible to discuss these issues.

Cleaning your machine and mask

Daily

It is important to wipe the mask every day with a clean, damp cloth soaked with warm water and a mild detergent (such as washing up liquid). The more you look after your mask the longer it will last.

Weekly

Mask

The mask will most likely need a better clean every week or two. To do this, start in the morning, separate mask from all attachments and the headgear and cushion gently in warm, soapy water (mild detergent e.g. washing up liquid). Rinse with clean, warm water and paper towel dry before allowing to air dry before using.

Information for Patients

Do not dry near a source of direct heat.

Tube

The same procedure can be used to clean the tube. Shake off all excess water after rinsing and hang the tubing vertically to allow the water to drain and dry completely.

Important: masks and tubing must be dried fully before use NIV machine

Disconnect from power supply before cleaning. Do not immerse the machine in water! Do not use any cleaning agents on the device. Wipe the machine with a clean, damp cloth and then dry with a soft cloth. Wait until the machine is completely dry before reconnecting power supply.

Are there any side effects or risks to the treatment?

Serious side effects occur rarely when using NIV. If you experience sudden onset breathlessness or chest pain, either in the daytime or at night when using your NIV machine, please seek immediate medical attention.

Common problems include:

Mask seal problems

A small leak from the bottom of the mask is common and will not affect the performance of the NIV device. However, a large leak or a leak into the eyes can be problematic. You can try tightening the headgear straps slightly at home, but bear in mind this can cause further problems. It is preferable to contact the Lung Function and Sleep department where experts can adjust the mask for you or even try a different style. There are many types of mask and it can sometimes take a number of attempts to find the most comfortable and effective mask.

Soreness on the nasal bridge

Soreness on the bridge of the nose is an indication that the mask is too tight at the top or a poor fit. The mask will either need refitting or replacing as the soreness can become worse over time. Contact the Lung Function and Sleep department immediately for advice – do not wait until your next appointment.

Throat dryness

A dry mouth is very common when using NIV, particularly with a mask that covers the mouth. Usually, a glass of water by the bed can enough to resolve this but, in severe cases, humidification devices are available.

Nasal problems

It is common to suffer from nasal stuffiness, or sneezing and a running nose when you first start treatment. This should settle on its own. If it doesn't settle after a week contact your GP and ask for a prescription for a nasal spray such as Flixonase, Beconase, or Nasonex.

Feeling bloated

In some occasions you might wake up feeling bloated. If so it might mean that either your mask is leaking, leading to you swallowing air; or that some of the settings on your machine need changing. If the problem is recurrent, please get in contact with the Lung Function and Sleep department.

Are there any alternatives to NIV?

There are no similar non-invasive alternatives to NIV treatment.

FAQs

Q. Can I survive a night without my ventilator?

A. Yes, most patients can spend one or two nights off their machine. They won't be very comfortable and symptoms of tiredness and headache may reappear – but rarely will this be dangerous.

If NIV is stopped for more than one or two nights, or there are frequent nights where NIV is not used, then this may impact upon your health and wellbeing. You should discuss any problems using your NIV with the Lung Function and Sleep department as soon as possible.

It is recommended that NIV is used as often as you have been advised.

Q. What if my NIV is not working?

A. If your machine breaks down please contact the department to discuss as soon as possible. If this occurs out of hours, please contact the Lung Function and Sleep department when next available; if you feel unwell please seek medical advice (either your G.P or the A&E department if necessary).

Q. Does my ventilator need a service?

A. Your ventilator and circuit must be checked every 12 months at the same time that we see you to assess your treatment. Tubing, mask and filters will be changed or checked and if there is a performance problem we may swap your machine for another.

Q. My ventilator doesn't feel comfortable or gives me a breath at the wrong time. Is this OK?

A. If your machine doesn't feel right you should get in touch with us on the next working day and bring your machine and circuit with you to the Lung Function and Sleep department at an agreed time.

Q. Do I need to bring my ventilator in the ambulance if I am admitted to hospital?

A. Yes, yes and yes! You must insist that your NIV machine comes with you to the hospital. This is very important. You may need it and there may not be an NIV machine available at the hospital.

Q. Should I use my ventilator in the daytime?

A. If you want to have a nap in the day or have got a chest infection, it may be good to use your ventilator during the day as well as at night. You won't become dependent on it – but you will gain relief from wearing it.

Some patients are asked to use NIV in the daytime as part of their normal usage; please check with the department if you are unsure.

Q. Is there anyone I can contact out of hours if there's a problem with my ventilator or breathing?

A. No, we don't have resources to provide an on-call service. If you feel your breathing is getting worse, or you are more unwell, call your GP or contact your out of hours service provider (with your ventilator) and they may if needed refer you to hospital to be seen by a medical expert. If your machine malfunctions and you can manage a few nights without it, contact us on the next working day.

Information for Patients

Q. Can I use oxygen whilst on my ventilator?

A. Yes, some people may already have oxygen with your ventilator. It is important that any oxygen tubing has a white plastic “fire-break” between the mask and the oxygen source.

If there is a problem

If the problem is related to your NIV treatment, do not struggle, the Lung Function and Sleep department are here to help you and can be contacted as detailed below. If you feel unwell please contact your GP.

The Lung Function and Sleep department can be contacted as below:

Opening hours are Monday to Friday, 09:00–17:00

Telephone Number: **0121 424 7229** (answer phone available for out of hours)

Your information

Name: Date issued:

Your machine:

Your mask:

| Breathing settings: | Date 1 | Date 2 | Date 3 |
|---------------------|--------|--------|--------|
| EPAP cmH2O | | | |
| IPAP cmH2O | | | |
| Rise Time | | | |
| Breath Rate bpm | | | |
| Inspiratory trigger | | | |
| Expiratory trigger | | | |
| Oxygen flow | | | |

Information for Patients

Please use the space below to write down any questions you may have and bring this with you to your next appointment.

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

Lung Function and Sleep

Area A, Treatment Centre
Good Hope Hospital
Rectory Road, Sutton Coldfield
Birmingham, B75 7RR Telephone: 0121 424 7229

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk.