**What is Non-Invasive Ventilation (NIV)?**

NIV is a treatment which may help with your breathing, using a machine and a mask.

The aim of this ventilation is to make sure that you get a good breath when your own breathing is not deep enough.

NIV is usually given through a mask over your nose. When you breathe in, the machine delivers a supported breath to make sure you get enough air and oxygen.

**What is it used for?**

There are many different reasons why NIV therapy may be needed, including:

- bone problems that make the chest small
- muscle problems that make taking a deep breath hard
- being very overweight
- where the brain does not tell you to breathe.

It can also be used alongside other treatments to prevent breathlessness and shallow breathing when you are lying down. Without treatment this may lead to a strain on your heart, or daytime sleepiness.

If you are unsure about the reason why you have been given the machine please ask the doctor or physiotherapist.

**Will I be seen by a Doctor, Nurse or Physiotherapist?**

The whole medical team is involved in your care.

Following an assessment to determine your need for the machine, you will be invited to spend approximately four nights in hospital.

During this time you will have a full explanation about the machine and how to use it.

A mask will be chosen and fitted.

Once discharged from hospital you will be reviewed as an outpatient by a physiotherapist and a Chest Medicine Consultant.

You will also receive a list of contact numbers should you have any queries.

**How do I use it?**

The NIV machine you have been given operates from the mains electricity, so it must be plugged in when in use.

**Turning your machine on and off:**

**Synchrony II:** To turn the machine on and off press the button on the side of the machine.

**A30:** To turn the machine on press the on/off button on the top of the machine, then select ‘therapy’.

To turn the machine off press the on/off button, then select ‘ok’. This takes the
machine to standby mode. To turn the power off completely, press the on/off button again and select ‘yes’.

NB: If the machine is disconnected from the mains whilst in standby mode it will alarm.

**Trilogy:** To turn the machine on press the on/off button on the front of the machine.

To turn the machine off press the on/off button on the front of the machine, then select ‘yes’.

**For all machines:**
Once the machine begins to deliver air, take your time to fit the mask securely.

Ensure you are in a comfortable position to allow sleep.

**When is it used?**

Once established the machine must be worn each night for approximately six hours or more.

If you regularly have a daytime nap, the machine may be worn at this time.

**Can I use oxygen with the machine?**

Yes: This will be discussed with you at your assessment.

**What equipment will I be given?**

- Ventilator
- Mask
- Tubing
- Filters
- Exhalation valve (this gets rid of carbon dioxide as you breathe out and is important, this will be pointed out)
- Headgear
- Oxygen connector (if oxygen is required).

**Masks**

There are many different types and sizes of masks available.

During your first assessment for mask ventilation you will be measured for an appropriate mask.

Once discharged from hospital with your equipment it is important to take care of your mask. It is best to wash your mask every 2-3 days in warm soapy water, and hand wash the headgear weekly.

**Nasal Mask**

![Nasal Mask Image]

**Nasal Pillows**

![Nasal Pillows Image]

**Full face mask**

![Full face mask Image]
Total face mask

My Mask is__________________________
Size______________________________

Information about my equipment

Ventilator:
It is important that your machine is placed on a firm, flat surface and it should be kept clean and dust-free.

If you are using a humidifier alongside the ventilator it is important that it is kept lower than the ventilator to prevent water draining into the ventilator.

Filters:
Prior to discharge you will be advised how and when to change the filters in your ventilator.

Attached to the front of your machine is a round white bacterial filter, at the back of the machine are black and white filters. The black filter can be washed and replaced monthly; the white filters should be thrown away and replaced with new each month.

Tubing:
Please wash the grey tubing in warm soapy water every 2-3 days, and ensure the tubing is dry before reconnecting to the ventilator.

Exhalation valve:
This is a vital part of the circuit set up. This will be pointed out to you when the machine is set up. On NO account must this exhalation valve be covered or blocked.

Headgear:
It is very important that you do not over tighten the headgear. Just because the mask is tight doesn’t mean it will work any better. If you are having problems with the mask fitting do not over tighten the straps, just let us know and we will alter your mask.

Oxygen Connector:
All of the home ventilators deliver pressurised air to the mask. Oxygen can be added using a concentrator attached to the mask or green connector. If you are being discharged home with oxygen please ensure that you know how many hours per day you should be wearing your oxygen.

Humidification
What is humidification and do I need it?

Some patients who use the NIV machine can develop a very dry sensation in their nose and mouth whilst using the machine.

If you develop any symptoms of dryness please contact the Physiotherapist who can arrange for you to have an additional piece of equipment, called a humidifier, which will quickly help you to overcome any uncomfortable sensations.

To switch the humidifier on/off press the round button on the front at the right, a green light will show when the device is on. Ensure you turn it back off after use.

You can adjust the temperature of the humidifier by turning the dial on the front right of the device. Selecting number 1 is the coolest temperature, increasing the dial increases the temperature and adds more moisture to the air you breathe.

Insurance

We recommend that you tell your household insurance company that you now have this machine and we can tell you the value of the machine on request.
Machine Maintenance and repair

For a breakdown or fault with the machine, please contact an engineer at Deva Medical on:

24hr emergency number 0772 088 3276
Office hours 01928 565 836

Your ventilator should be serviced yearly by Deva Medical. They will contact you when the service is due, to arrange a convenient time to visit your home and carry out the service.

Contact information:

For any queries/advice about the machine, e.g. if you are unsure about the use of your machine or masks please contact one of the physiotherapists at Aintree Hospital:

Telephone 0151 525 5980 BLEEP 3334
Karen Ward / Helen Ashcroft / Verity Ford
Available: Mon – Fri, 9 am - 4 pm.

For replacement equipment ONLY e.g. mask, filter etc. please write to or email the address shown below stating the exact equipment you require.

sleep.lab@aintree.nhs.uk
The Sleep Laboratory
6th Floor Aintree Hospital
Longmoor Lane
Liverpool
L9 7AL

For Out of Hours ADVICE ONLY
You may contact Ward 19 Ventilation Inpatient Centre for advice only on 0151 529 3602
If you are feeling unwell, please see below.

Feeling Unwell?
If you are feeling unwell and need medical advice please contact your own G.P. who will be able to assess and advise you.

If you are taken acutely unwell and require admission to your local hospital please take your ventilator and this booklet with you.

Travelling abroad with your Non-Invasive Ventilator
Most machines can be used abroad if using a plug adaptor.
You must ensure that your machine is taken as hand luggage.
If you are unsure about travelling please contact the physiotherapists for advice.

Equipment and Machine settings

Ventilator
Model:
Serial no.
Humidifier: Yes / No
Model:
Serial no.

Machine settings:
DATE:
IPAP
EPAP
BPM
Mode
TV
Ti
Oxygen
Alarms
Aintree University Hospital NHS Foundation
Trust is not responsible for the content of any
material referenced in this leaflet that has not
been produced and approved by the Trust.

If you require a special edition of
this leaflet

This leaflet is available in large print, Braille,
on audio tape or disk and in other languages
on request. Please contact the Customer
Services Department on:

(Phone) 0151 529 3287
(Textphone) 0151 529 2523
(Fax) 0151 529 2019

Si necesita una edición especial de
este folleto
Este folleto está disponible en letra grande,
en Braille, en cintas de audio o en disco y en
otras lenguas a petición. Por favor, contacte
con el Servicio de Atención al cliente en:

Haddii aad u baahantahay cadad
khaas ah oo ah warqadan
Warqadan waxa ad ku heli kartaa haddii aad
codsato iyadoo ku qoran far balaadhan,
Braille (waa farta ay ahkhiyaan dacka
Indhaha la), iyadoo hadal cajalad ama disk
duuban ama ku turjban luqad kale. Fadlan
ka la soo xichiiidh Adeega Macaamiski:

آكرا أوكس أصولايني يرجبى ك خصوصى
يوج مصوانى يرجبى زي كى أهانى، بريل (اندهور كا رسم الخطا)
سماكت كرى وى الى كيب باكسيا بير اور زيبان من
دروهاست بر ستيلبى بر مؤقتين بريوانى كستميسوس سي
دينيى كى نمير بر رابطى ترى:

Os oes arnoch angen rhifyn
arbennig o’r daflen hon
Mae’r daflen hon ar gael mewn print bras,
Braille, ar dafn sain neu ddig ac mewn
leithoedd eraill ar eich cais. Cysylltwch a
Gwasanaethau i Gwmeriaid ar:

W przypadku, gdy potrzebujesz
specjalnego wydania tej broszury
Broszura ta jest dostępna w dużej trzcincie,
Braille’u, na kasecie do odsłuchu lub na
dysku jak również w innych językach na
zyczenie. Prosimy o kontakt z Serwisem dla
klientow pod numerem:

Telephone 0151 529 3287
Textphone 0151 529 2523
Fax 0151 529 2019

[for the hearing impaired]