



Home non-invasive ventilation (NIV):

This leaflet explains the basis of your home non-invasive ventilation (NIV) machine that has been issued by the Respiratory Medicine Outpatient Department at the Royal Berkshire Hospital.

How the lungs work

The principle function of the lungs is to get oxygen into the body and to remove carbon dioxide. When lungs start to fail, oxygen levels drop and carbon dioxide levels can rise – this is often referred to as respiratory failure.

What is NIV?

NIV is a type of ventilator machine that uses air pressure to assist the act of breathing. The system consists of the ventilator machine itself, some tubing and a mask that is worn to allow the air pressure to enter the respiratory system (airways). Occasionally and sometimes temporarily, oxygen may also be added to the system if required. **Some patients may require prolonged use (16+ hours per day) on the machine.**

Why use NIV?

NIV is used when respiratory failure has been diagnosed by your doctor or a member of your medical team. It is used to help with the act of breathing and increase ventilation.

What does it feel like?

Under normal circumstance, the lungs work automatically; however, when using NIV to support them, it initially feel strange and can take some time to get used to the sensation. The medical team will discuss with you the settings you require to effectively ventilate your lungs. **It is important that you do not adjust the settings yourself.** If you require oxygen, it is very important you **do not** increase the flow rate as this can make you ill. You may be given an Oxygen Alert Card to warn emergency staff that high flow oxygen would make you very ill.

When is NIV used?

NIV is usually used at night while you are asleep, but sometimes it can be used when you are awake as well. It may be recommended that you also use the system when you take a planned nap or are sat quietly watching television or reading.

Mask

NIV works best with a well-fitting clean mask; a range of masks are available. The team will spend time fitting you with the best mask to suit your needs. However, if you find your mask

uncomfortable, please tell us and we will try another type.

Cleaning and maintenance

The machine has a filter that that will need cleaning and /or replacing. You will be shown how to do this and it will be checked when you come to your outpatient appointment or when you are seen by a clinician. The cushion of your mask should be wiped daily with a damp cloth and the mask frame and headwear should be washed regularly with non-perfumed soap and warm water. The mask should usually last 12-months. However, if it breaks or is damaged, we can repair or replace it.

Things to look out for

- If the skin around where the mask sits becomes red and sore, contact the Respiratory Team for advice.
- Large leaks around the mask will make NIV uncomfortable, less effective and more difficult to tolerate.
- At the end of use, always switch the machine off – unplugging while in use will set the alarm off.
- If you live in an area with repeated power interruption, you may need an external battery pack. Please speak to a member of the Respiratory Team for advice.
- If you are getting a dry mouth, nose or throat, you may benefit from some humidification. This can be added to most NIV machines. Contact the Respiratory Team for advice.
- Travel – the machines are quite portable and can be taken on an aeroplane, if you need to use it on a long haul flight. We can provide a letter to explain its use for your airline. Again, ask the Respiratory Team for advice.

What if the machine stops working?

- If your machine stops functioning and you are using it at night only, please contact us urgently the following morning and we will try to offer a replacement or repair within 1-2 working days. We do not currently offer a 24-hour service.
- **If you use your machine for more than 16 hours in every 24, we will normally provide you with a backup machine set to the same settings and a power pack.**
- If you develop headaches, new confusion or drowsiness when you are using NIV, please contact the Respiratory Medicine Team on 0118 322 6676 between 8am to 4pm. If you have not been called back or feel it is an emergency, go to the nearest emergency department (A&E).

Traveling with the NIV machine.

- If you wish to travel with your NIV machine, please inform the Respiratory Medicine team and we will make sure you have the necessary back-up equipment, in case there is any fault with the equipment.
- Travel insurance should be taken out with a reputable company and full disclosure of your diagnosis and the use of NIV stated at the time of purchase.

Energy suppliers

It is advisable to notify your energy supplier that you have an NIV machine and ask to be placed on the Priority Services Register. This is a free service that provides additional help, particularly if there is a power cut, (planned or otherwise).

How often will I be seen?

You will be seen at regular intervals to check your carbon dioxide levels and make sure the machine is working correctly. Your medical team will advise on how often this will be. **If you become acutely unwell with breathing related issues, please contact the team on the number below.**

Emergencies and Oxygen Alert Card

We will give you an Oxygen Alert Card. Always show this to paramedics and medical staff so that appropriate treatment can be given. If you need to come into hospital for admission or a routine outpatient appointment, please **ALWAYS BRING YOU MACHINE, MASK AND TUBING WITH YOU.** Ask ward staff to contact Respiratory Medicine if you are admitted under other situations.

Contact numbers

Please contact us if your machine has a fault or you think your NIV settings need to be reviewed in clinic.

Clinical Admin Team 11 (Respiratory Medicine)

Monday to Friday, 8am to 4pm

Tel: 0118 322 6676

Email: rbbh.CAT11@nhs.net

Location: Respiratory Medicine, South Block, Level 2 at the Royal Berkshire Hospital.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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