# The Royal Wolverhampton

# Non Invasive Ventilation (NIV)

**Respiratory Centre** 

# What is NIV?

Non invasive ventilation is used to help people whose breathing needs extra support.

NIV works by supporting your breathing muscles when you breathe in. This will reduce the amount of effort needed to breathe when you go to sleep which should increase your oxygen levels and remove your waste gas.



# How does it work?

NIV delivers a prescribed pressure of air which will match the rate of your own breathing. Supplementary oxygen can be added through the machine if required.

# The NIV system consists of:

- The machine or pump to produce the pressurised air
- A flexible two metre length of tubing to deliver the air
- A close fitting mask worn over the mouth and/or nose, with ports to allow the exhaled air to escape
- Head straps to hold your mask in place.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

# How do I use the NIV?

If you have a humidifier fill the tank to the maximum fill line. Fit your mask with the NIV turned off. Adjust the straps for comfortable fit, check and readjust the straps when lying down.



# Turning the NIV on.

- Ensure the mains cable is connected and the power is on
- Press the power button on top of the machine to start the treatment.

# Humidifier control

You are able to change the temperature of the water if a humidifier is attached to your machine but this does not affect the pressure settings. When the machine is switched on the patient options screen is highlighted in blue. Press the large round button and a menu will appear, by twisting this button highlight humidification and press the button again. A number will appear by twisting the button the temperature of the water can be changed between off or the maximum temperature of eight. If dryness is a concern a higher number is recommended, or if condensation is forming in your mask or tubing then the temperature should be lowered.



# What should I expect when using NIV?

It is normal to feel some resistance to breathing out, this is because you are having to breathe out against the pressure of incoming air. Your body should not have any difficulty in doing this when you are asleep but it can take time to get used to this feeling.

Don't worry if you are unable to use your NIV throughout the night initially. It is important that you put it on every night in order to get used to it with the aim of being able to fall asleep with it on and wear it all night.

When you are able to use your NIV throughout the night you may feel more refreshed on waking and better during the day. This may continue for a few weeks following commencement of use.

# How often do I need to use my NIV?

Ideally every night during sleep. It is recommended that you use your NIV for a minimum of four hours a night but ideally throughout the time you sleep.

Use of your NIV should be considered as a long term treatment.

# What problems may I run into?

#### 1) Mask Fitting:

Masks do not need to be tightly fastened and small leaks around the lower part of the face are acceptable.

If the mask is uncomfortable, if it leaks into the eyes despite altering mask position or leaves red marks on the bridge of the nose that last longer than 20 minutes after removing the mask, then please contact the sleep service for advice.

If your mask breaks or needs replacing then please also contact us for help and advice.

Masks should last between 6 to 12 months each.

#### 2) Runny nose, sneezing fits, dry nose, mouth or throat:

All of these are common and should settle in a few days. If symptoms persist please contact the sleep service for advice.

The data from your NIV equipment can be remotely accessed during the department opening hours without you having to attend. This may help us discuss any identified straight forward mask or usage problems.

# Do I need to clean the equipment?

Yes, it is very important to keep your mask and tubing clean to prevent infection and damage to the equipment. Please clean the equipment as follows:

#### Daily:

Take apart your mask as you were shown by staff at your hospital appointment. Wash your mask in a bowl of warm soapy water. Rinse thoroughly with cold clean water and allow to air dry before reassembly. Do not use bleach or alcohol based products as these will damage the masks.

#### Weekly:

Remove tubing from machine and place with mask and headgear into a bowl of warm water with washing up liquid in it for about 10 minutes. Rinse thoroughly with clean water and then leave all the equipment to drip dry. Do not place any equipment directly onto a radiator / heater to dry. Also wipe the NIV machine down with a damp cloth to keep it dust / dirt free.

## Do I need to bring the NIV with me to appointments?

Bring your NIV with you to any appointments relating to your NIV treatment, for example if you have a follow up appointment at the Respiratory Centre.

If you have to visit hospital for an overnight stay for any reason, you will need to bring your NIV equipment with you. This is very important as we do not have spare machines to loan to the wards.

You must inform Doctors and Anaesthetists that you are on NIV treatment. This is particularly important if you are to have a general anaesthetic as your aftercare will need more careful consideration.



# What if I'm going on holiday?

If you are going away on holiday then you can take your NIV machine with you. If you are flying, your NIV needs to be carried as hand luggage to stop it getting lost or damaged, and must not be transported in the hold. If required we can provide information to explain this to the airline.

If you use supplementary oxygen this needs discussion with the doctor or physiologist before you book your flight.

# Does the machine require regular servicing?

- Yes, the NIV machine requires annual servicing
- This is both a legal requirement and Trust policy
- There will be a label on the equipment stating either last or next service date
- Please contact the department one month before this date to arrange for your machine to be serviced
- If your equipment is not serviced on or before this date the Trust will not be liable for any failure of operation
- Thank you for your cooperation.

#### What if my machine breaks down?

Majority of patients who are issued with NIV are medically stable and should be able to have a night or two off treatment without any significant impact on their health.

If your NIV breaks down a replacement device can be issued Monday to Friday 08:30 to 17:00 by the respiratory physiology team. Contact 01902 695061 for advice.

If your NIV breaks down out of the above hours and you are unable to manage without it for one or two nights then the advice is to attend the hospital Emergency department.

## **Further information**

#### If you have any problems or require further information about NIV please contact:

**The Respiratory Centre (B1)** New Cross Hospital Wolverhampton Road Wolverhampton WV10 0QP

01902 695061

Monday to Friday 09:00 to 17:00

Please ensure you ring to arrange an appointment time before attending.

#### English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

#### Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

#### Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

#### Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

#### Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

#### **Traditional Chinese**

如果您需要以其他方式了解信息,如易读或其他语种,请告诉我们。 如果您需要口译人员或帮助,请告诉我们。

> Designed & Produced by the Department of Clinical Illustration, New Cross Hospital, Wolverhampton, WV10 0QP Tel: 01902 695377.