

# UNDERSTANDING YOUR HOME OXYGEN THERAPY

This factsheet aims to give you information about how home oxygen therapy will help you, how it is provided, the equipment involved and how to use it.

## Why do I need oxygen therapy at home?

In order for oxygen therapy to be of benefit to you, you must be 'hypoxic'. This means that you do not have enough oxygen circulating in your blood stream. This can happen for various reasons including:

- If there is a blockage, or obstruction, in your air passages your lungs may not be able to provide enough oxygen to your body.
- In some chest conditions the air sacs in your lungs may be damaged. Although enough oxygen is present it is more difficult for the gases to pass into and out of your lungs.

The effort involved in trying to obtain the extra oxygen your body needs can result in tiredness and breathlessness, particularly after coughing or activities such as walking.

Hypoxia can also affect other parts of your body such as your heart, causing ankle swelling and fluid retention. It can also cause poor concentration, sleepiness and irritability.

Breathlessness is not a reason in itself for having oxygen therapy.

- You can be breathless but still have adequate oxygen levels.
- Alternatively, your breathing may be comfortable but your oxygen levels may be low.

See the CHSS factsheet F35 'Coping with breathlessness' for more information.

## How will oxygen therapy help me?

Oxygen therapy allows you to breathe air with a higher concentration of oxygen which helps to correct your hypoxia and relieve some of your symptoms.

You have to be assessed to find out if you will benefit from oxygen therapy. Severity of breathlessness is not a reliable way of deciding if oxygen therapy will be helpful.

See the CHSS factsheet F34 'Understanding your oxygen assessment' for more information.

Some people don't like the idea of having to use oxygen for fear of becoming dependent on it or of reducing their independence. Usually oxygen therapy improves energy and can help you increase your level of activity.

FACTSHEET

Once it has been decided that you will benefit from oxygen, you will have regular reviews to ensure that:

- Your oxygen levels are high enough.
- You are using your oxygen correctly and for long enough every day.
- You still need to use oxygen.

A prescription will be sent to Dolby Vivisol the oxygen provider for Scotland.

### **How long do I have to use oxygen?**

If you have just been discharged from hospital (e.g. after a chest infection) you may not be prescribed longer-term oxygen therapy immediately. You will be reviewed about a month later, when your condition is more stable, to allow a proper assessment of your long-term oxygen requirements.

In lung disease and particularly COPD, oxygen usually has to be used for at least 15 hours per day to achieve the maximum benefits. To achieve this most people use it overnight and at quiet times during the day to make up the 15 hours.

If you have been advised to use oxygen continuously and you need to take a break from it, it is best to do so while you are awake and resting quietly, not while sleeping, walking or doing any activities.

### **Oxygen supply and equipment**

Dolby Vivisol is the oxygen provider contracted to NHS Scotland to provide oxygen services. They are responsible for the initial supply and on-going servicing, maintenance and repair of oxygen concentrators.

Your oxygen may be supplied using an oxygen concentrator and nasal cannulae.



### **Oxygen concentrator**

An oxygen concentrator is a mechanical device which operates from your mains electricity supply. It works by taking air from your room and passing it through a filter that absorbs other gases. This concentrates the amount of oxygen the air contains, producing a continuous supply of approximately 93% pure oxygen.

There is a built-in flow meter attached to the concentrator, allowing your prescribed flow rate to be set.

All concentrators have wheels on the base to ease movement, although once installed in the home there is rarely a need to change their location.

The concentrator is usually placed in an agreed position in the home, which is well ventilated and away from furniture and walls. The noise of it running can be distracting so it should be sited somewhere where it will not disturb your sleep or other members of your household. A small rug can help reduce noise when used on a wooden floor.

Always follow the recommendations and advice provided with your oxygen concentrator. The correct amount of oxygen will be determined at your assessment and you should not make any changes to this unless you have had specific instructions to do so. For more information about oxygen concentrators, ask your healthcare professional.

### **Nasal cannulae**

Oxygen therapy is usually given through plastic nasal cannulae (prongs that are inserted into your nostrils) attached to a length of tubing. Occasionally a face mask may be used. This must be assessed and recommended by a health care professional.

The part of the nasal cannulae that sits in your nostrils can be washed; the rest of the tubing should be wiped. Nasal cannulae allow for continuous oxygen therapy when eating and drinking, and also make it easier to talk.

A long length of tubing will be provided with your oxygen concentrator to allow you to move around your home. However, too much tubing increases the chances of it getting caught in furniture and becoming a tripping hazard. If you have any concerns about this please discuss it with your healthcare professional or Dolby Vivisol engineer. The connection between the tubing and the flow meter should be snug.

### **Provision and maintenance**

You will be shown how to use your concentrator and given instructions regarding caring for it.

Dolby Vivisol service engineers will check the concentrator about every three months. They will also provide any replacement nasal prongs (cannulae) and tubing required. Readings from the hour counter, attached to the concentrator, monitors how it is being used. The readings are sent back to the Dolby Vivisol team who process a refund of the cost of additional electricity used.

### **Back up oxygen cylinder**

In case of machine failure or power failure you will also be provided with a compressed oxygen cylinder. This will be set to provide the flow rate prescribed for you. You will be shown how to use this when your equipment is installed. If you have a problem with your machine you should start using your cylinder and contact Dolby Vivisol straight away. If the problem cannot be resolved over the phone an engineer will call as soon as possible.

### **Safety issues**

As part of your referral process for oxygen therapy your respiratory specialist will assess you and your home for use of oxygen. If oxygen is installed a Dolby Vivisol engineer will





carry out a full risk assessment. If appropriate they will offer safety advice.

If you are having home oxygen therapy, you should contact the Scottish Fire and Rescue Service. They will conduct a risk assessment and fit smoke alarms if required. Call 0800 073 1 999 or visit the Scottish Fire and Rescue Service website ([www.firescotland.gov.uk](http://www.firescotland.gov.uk)) to arrange a free assessment.

Oxygen on its own will not explode, but it will support burning, so it is extremely important that extra care is taken when using and storing oxygen in your home, and when using portable oxygen outside.

- No smoking is permitted around oxygen by anyone as clothing and hair can easily be ignited. This includes the use of e-cigarettes.
- When using your oxygen you should always be at least 3 metres from sparking objects, naked sources of flame and extreme heat.
- No oil or grease should be applied to any part of the oxygen equipment.
- Do not use oil-based moisturisers such as petroleum jelly on the skin of your nose. Use a water-based product such as aqueous cream instead.
- Your back-up oxygen cylinder should be stored upright, away from open or gas fires, water heaters or any other source of heat or flame.

If you are still smoking you will not be prescribed oxygen as there is a risk of severe facial burns and combustion. If you already have oxygen at home and continue to smoke, your home oxygen supply will be reviewed and may be withdrawn.

You should advise your home insurer that you have home oxygen therapy.

## **Practical issues**

### **Dry mouth, lips and nose**

Oxygen therapy tends to dry up your mouth, lips and nose. Try to:

- Take frequent sips of water
- Use a non-paraffin based moisturiser on your face
- Apply water-based lubricating jelly to nose and lips



### **Ear protection**

Another common problem can be sore ears where the tubing sits. Oxygen tubing protectors can be obtained through the oxygen therapy service or from your Dolby Visisol service engineer.

## Exercising

As you use more energy during exercise, you may need extra oxygen to help you increase the amount of exercise you can do. To find out if you need more oxygen when exercising you will need an exercise assessment. This is usually in the form of a timed walk test, done with and without added oxygen. If your respiratory specialist agrees, you may have oxygen provided for use when you exercise.

## Out and about with oxygen

If you leave your house on a regular basis you may be prescribed portable oxygen. This will be considered as part of your respiratory assessment.

There are different ways to have portable oxygen. It may be provided in the form of HomeFill, liquid oxygen, a portable oxygen concentrator or a cylinder with or without an oxygen conserver.

Portable cylinders are smaller and lighter weight than regular cylinders.

- If you travel with an oxygen cylinder in your car it should be safely secured. For more information about this refer to the Dolby Vivisol booklet 'Your home oxygen service' or contact your Dolby Vivisol engineer. You should advise your car insurer that oxygen is being carried.
- If you intend to travel with oxygen, contact Dolby Vivisol for advice on how this should be transported. This may depend on the type of portable unit you have.
- If you intend to travel on public transport such as buses, taxis, aeroplanes or ferries with your oxygen you must check their regulations before travelling as different transport methods have different regulations.

An oxygen conserver may be attached to a portable oxygen cylinder, to extend the life of the cylinder. It does this by only releasing oxygen when you breathe in; unlike the usual system that provides oxygen continuously. By only releasing oxygen as you breathe in, you still achieve your prescribed amount of oxygen but no oxygen is wasted from the cylinder when you are breathing out. This means that the time your cylinder will last for will be greatly extended. Your respiratory service may be able to provide one if it is appropriate for you.

## Travelling with oxygen

If you are planning to go on a trip or holiday in the UK you should contact Dolby Vivisol for initial advice at least 3 weeks before the date. All requests should be submitted by email to [shol.dv@nhs.net](mailto:shol.dv@nhs.net) or by writing to:

Customer Services, Dolby Vivisol, North Suite, Lomond Court, Castle Business Park, Stirling, FK9 4TU.

You will need to provide full details of your holiday as outlined in the Dolby Vivisol booklet 'Your Home Oxygen Service'.

When travelling abroad you are responsible for organising your own oxygen supply.

## Flying

Advanced planning is very important.

If you are considering flying you will need to check first with your GP or respiratory consultant that you are fit to fly and you may be required to have an assessment. This will include a physical examination and questions about your condition. Some tests may also be done, for example you may be asked to walk a set distance to see how breathless you get. Other tests mimic the effects of being in an aircraft cabin, allowing the doctors to see how your body will react in the air. This is commonly referred to as a 'fitness to fly' test. This may not be offered by all health boards and some may charge for this service.

Check with your airline to see if they have a set form or test for you and/or your GP to complete.

If you need oxygen in-flight, check the oxygen arrangements with the airline you intend to travel with *before* making any bookings as you may need to provide your own. Some airlines now prohibit in-flight oxygen during take-off and landing. Ask your airline what its policy is.

If you need oxygen on the ground, check with the airline whether you will need to provide your own for any transfer between flights.

Ask your airline if your oxygen is included in your cabin baggage allowance.

See the CHSS Factsheets F6 'Holidays' and F13 'Air travel' for more information.

## Oxygen alert card

A very small number of people who use home oxygen may be sensitive to being given too high levels of oxygen when unwell in an emergency situation. If this is the case you will be provided with an oxygen alert card by your healthcare professional. You should keep this card with you at all times.

### Who to contact

#### Dolby Vivisol

24-hour free phone number that you can call for help with your oxygen equipment and supplies: 0800 833 531

Email: [oxyadminsco@dolbyvivisol.com](mailto:oxyadminsco@dolbyvivisol.com) Website: [www.dolbyvivisol.com](http://www.dolbyvivisol.com)

If you would like to speak to one of our nurses in confidence,  
please call the Chest Heart & Stroke Scotland Advice Line Nurses

0808 801 0899

Call FREE from landlines and mobiles