

Home Oxygen Therapy

What is it?

Long-term oxygen therapy (referred to as LTOT) is a treatment option for people with chronic lung conditions. When the lungs are affected by disease it can mean they are less able to transfer oxygen from the air to the blood in the body, where it is needed for everyday functioning. This may produce symptoms of shortness of breath whilst performing daily tasks, such as washing, dressing or climbing the stairs for example.

Chronic obstructive pulmonary disease (COPD) and bronchiectasis are examples of diseases where home oxygen therapy may be required. There are however many more for which it is beneficial.

How do we know if you need it?

You may be referred by your GP or consultant to a specialised unit such as Lung Function and Sleep to assess your needs for the therapy. The Lung Function and Sleep department at the Queen Elizabeth Hospital Birmingham (QEHB) is an assessment centre for home oxygen therapy. Assessment usually requires two visits to the unit when your condition is stable. On both occasions a blood sample will be taken and fed into a specialised machine. This tells us what the oxygen levels are in your blood and whether they are at a level that would benefit from home oxygen. If your readings are consistently low and below a certain reading, you are likely to benefit from the therapy. The level of oxygen you require will be calculated during your second visit, when you will be assessed by putting you on oxygen and measuring your blood values again, usually after 20 minutes on the therapy. It can however take longer if a different level of oxygen is required.

Home oxygen therapy is not suitable for all patients with lung conditions and we will know if this is the case after your assessment. You may be prescribed oxygen on discharge from hospital. This is sometimes a temporary measure and may not be needed long-term. Your assessments and follow-up will likely take place in the QEHB or you will be referred to an assessment centre near your home.

What equipment is used to give the oxygen?

An oxygen concentrator is used to administer the additional extra oxygen you require. This is a device approximately 2 feet wide by 2.5 feet tall which plugs into an electricity outlet. It filters and concentrates oxygen from room air. You are attached to this concentrator by a long, flexible plastic tube which has two prongs at the end (nasal cannulae), which fit one up each nostril. They remain in place by hooking over the ears and secure gently under the chin. Oxygen masks are also available.

You can choose to have oxygen piped throughout your home so it is conveniently available in every room without moving the concentrator. It is also possible for enough tubing to be installed to make garden areas accessible. You will be given supplies of spare oxygen tubing and nasal cannulae and will be advised how often to change these.

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My electricity bills will increase whilst using oxygen, do I have to pay this extra cost?

The extra electricity used to run your concentrator will be reimbursed. There is a meter in the oxygen concentrator from which a reading is taken quarterly. Payments can be made automatically into your bank account if this is more convenient for you. A Baywater engineer will request your bank details in the way of a sort code and account number to be able to do this.

How many hours a day do I have to use oxygen for?

Oxygen therapy is most effective when used for 15 or more hours each day. This can include using the oxygen at night, which many people find an easy way to achieve the hours recommended. Ambulatory or portable cylinders are also available to carry outside the home to help you carry on your daily activities whilst keeping up your usage hours.

How do I get out and about if prescribed long-term oxygen therapy?

Portable equipment can be prescribed after an assessment in the Lung Function and Sleep department. This is organised following a referral from a healthcare professional. Portable equipment allows you to carry on as usual with your activities without being tied to the home for your oxygen supply.

What happens if I need home oxygen therapy?

The Lung Function and Sleep department will organise the installation of the equipment needed. With your consent we will pass on your details to the company working with the NHS in the West Midlands region to supply oxygen therapy. They will call you and arrange to supply and install the equipment at your convenience. They will also instruct you how to use the therapy and give you helpline numbers if you require advice or assistance.

Can I go on holiday if I have been prescribed long-term oxygen therapy?

Arrangements can be made quite easily to have oxygen supplied anywhere in the UK. For Oxygen required outside of the UK you are advised to hire Oxygen equipment privately.

Will I always need oxygen and what if the oxygen level I am prescribed needs changing?

Once oxygen therapy has been prescribed, you will be followed up on a regular basis. Four weeks after starting the therapy, a nurse will visit you at home, followed by review in our Outpatient Clinic at 3, 6 or 12 monthly intervals. During initial home visits we will check your oxygen levels to make sure the prescription is still correct. Occasionally during your reviews, we may find you no longer need oxygen. If so, we will discuss this with you and arrange removal of the equipment.

What are the benefits?

Long-term oxygen therapy may reduce the symptoms of lung disease, including shortness of breath and fatigue. It may also improve your chance of survival and reduce complications that may occur as a result of lung disease.

Are there any side effects?

Some people may be unsuitable for oxygen (as shown during assessment) and therefore will not be prescribed the therapy. When using oxygen, some nasal dryness may be occur due to the nasal cannulae, but this can be easily treated with water based lubricants which can be purchased over the counter or prescribed by your GP. Oil–based products (like Vaseline) should not be used

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as they are unsuitable for use with oxygen. Occasionally people may develop problems associated with retaining the waste gas carbon dioxide whilst using oxygen. Symptoms of this include headaches in the morning after sleeping with oxygen on or regular headaches when using oxygen, which you did not have before starting oxygen therapy. Other signs are unexplained confusion and/or drowsiness. Please contact a member of the team on the numbers provided at the end of this leaflet if you experience any symptoms.

Are there any risks?

Oxygen is highly flammable, it is essential that you do not smoke or use e-cigarettes whilst using home oxygen therapy. Other people should refrain from smoking or use e-cigarettes near you also when you are using oxygen. This could cause significant harm (usually burns) to you and those in your house hold. The benefits of oxygen over the risks of continuing smoking will be discussed with you by your doctor or nurse before oxygen is prescribed.

The oxygen equipment will be positioned in a safe place within your home by the oxygen suppliers. They will explain fully how to use your oxygen safely as there are a few simple precautions you will need to follow. These include not using a gas cooker or any appliance with naked flames whilst wearing your oxygen. If you do smoke against safety and/or medical advice, your oxygen may be removed.

A back-up cylinder is provided (in case of a power failure). This is not portable and should not be moved from the location it is placed in by the supply company.

West Midlands Fire Service provides safety checks and advice on the placement of smoke alarms, and it is recommended that you use this service. If the supply company have any concerns about the suitability of your home for the oxygen equipment, they will contact the fire service safety advisor.

A member of the oxygen team will go through all of the safety advice with you including the dos and don'ts. This will be formally documented and require your signature.

Equipment servicing

Your oxygen concentrator will be regularly serviced, and safety checked. You will be shown how to change the filters in the machine. These help filter the oxygen supply you breathe. They will also regularly check and change the back-up cylinder if necessary.

What if I don't want oxygen therapy?

You can choose whether you wish to have the therapy. If you feel it is not something you would like to have at present, we can continue to monitor you. Some people may have low blood oxygen levels but may not be particularly breathless so feel less inclined towards the treatment.

Are there any alternatives to oxygen therapy?

There are no alternative treatments to increase your blood oxygen levels, however when you attend the department your medications will be reviewed to ensure you are receiving the optimum or best medications for your condition. If we think your medication could be improved, a referral to a respiratory consultant will be arranged to address this. In some cases, a change in medication can improve your oxygen levels.

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Contact details

Respiratory Oxygen Nurses:

Telephone numbers

0121 371 3870 0121 371 3889 0121 371 3873 0121 371 3871

Useful websites

British Lung Foundation www.lunguk.org Phone number: 0207 688 5555

Lung Function and Sleep

Queen Elizabeth Hospital Birmingham Mindelsohn Way, Edgbaston Birmingham, B15 2GW Telephone: 0121 371 3870

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.

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