

Long Term Oxygen therapy (LTOT) patient information Leaflet

Lungs have a fantastic capacity for getting oxygen into the body. It is only in the case of severe lung disease or severe illness that additional Oxygen may need to be supplied.

Oxygen is a drug and as such it has to be prescribed correctly. There are strict guidelines as to when Oxygen can be prescribed for long term use. This is because there are some instances where supplemental Oxygen can be bad for you.

Often Oxygen is prescribed whilst in hospital for short term use whilst an individual is severely (acutely) unwell. This does not mean that the individual will need to have Oxygen at home. There are instances where Oxygen is prescribed to initially go home, but as the individual gets better they no longer require Oxygen.

Being breathless does not always mean that you need extra Oxygen. Oxygen is prescribed because the levels of Oxygen in your blood are low.

It is common for individual with lung conditions to feel slightly more anxious about their breathing, this increased anxiety can on occasion make you feel slightly more breathless, this does not necessarily mean that you require Oxygen at this time.

Oxygen levels can be assessed by placing a clip on a finger. The clip can monitor your Oxygen level and your heart rate. If the reading from the clip is above 90% it is highly unlikely that you will require Oxygen at this time. If the Oxygen levels are below 90% then you will require a blood test to determine the true levels of Oxygen in your blood. The blood can be taken from your arteries in your wrist (most common) and some centres / hospitals can take blood from your ear lobe.

If your Oxygen levels are constantly low, even when you are stable, you may be given what is classed as Long Term Oxygen Therapy (LTOT). There are strict guidelines for the prescription of Oxygen in this manner. This leaflet will guide you through the LTOT process and the types of Oxygen delivery systems there are.

Oxygen Assessment

Initially as mentioned earlier you will have a blood test to determine the actual level of Oxygen in your blood. If this level is lower than **6.3KPa** then Oxygen will be given to you for around thirty minutes, after which more blood will be taken. This process will continue until the levels of Oxygen in your blood are **8KPa**. At this point the Oxygen assessment is over. You will be prescribed Oxygen at the concentration that meant your blood Oxygen levels were around 8KPa.

A form will be completed and Oxygen will be delivered to your home.

After three months another assessment should occur. This has to be performed when you are stable. The process will start with you having your Oxygen, if you are using it constantly, being removed and you breathing room air for around thirty minutes. After thirty minutes blood will be taken and a measurement of the actual Oxygen levels in your blood will be made. Once the correct concentration has been found this will become your prescribed Oxygen level.

Ambulatory Oxygen

If you are an active person whose Oxygen levels decrease when you are moving about, then you may be a suitable candidate for portable Oxygen. Portable Oxygen often comes from a small portable cylinder; these portable cylinders weigh about 2-3kg (6-7lb) and come with a shoulder carrying case. The oxygen in them lasts for about three hours (depending on how high the flow of oxygen is set at).

A conserving device is designed to be attached to a portable oxygen cylinder to make the three hour supply last longer. The conserving device allows you to receive the oxygen supply in time with your breathing – you get a pulse of oxygen when you breathe in and no oxygen is wasted when you breathe out. Although this makes oxygen last longer, it is not suitable for everyone as it may not give you high enough levels of oxygen compared to having your oxygen in a continuous flow. Conservers are not usually suitable for children. Your Respiratory Specialist can advise you if you are suitable for this device.

An ambulatory Oxygen assessment will need to be made. This will mean that you will perform a six-minute walk test, several times. A six-minute walk test is a test that measures how far you can walk and assesses what happens to your Oxygen levels while you are walking. The reason this test will be performed several times is so that we can assess if Oxygen is really of any benefit to you at this time. The procedure will entail you walking with a cylinder up and down a corridor for six minutes. You will be able to stop as often as you need throughout the six minutes and you can walk at your own pace. The whole time a little device will be attached to your finger allowing us to assess your Oxygen levels. A rest period is allotted between each walk test. Once the walk tests have been completed a report will be made and if you fulfill the requirements ambulatory Oxygen will be supplied to you.

Types of Oxygen deliver devices

Cylinders, contain compressed oxygen, and come with tubing and a nasal cannula (short plastic tubes that fit into each nostril) or a mask. Cylinders are delivered to your home and have to be replaced when empty. They usually provide oxygen for up to eight hours, depending on how big the cylinder is and how high the flow of oxygen is set at. This delivery form is usually given initially

Concentrators, You will be advised to use an oxygen concentrator if you need to use oxygen at home for a number of hours each day. This treatment is known as Long Term Oxygen Therapy (LTOT) and for adults is usually recommended for at least 15 hours a day. This is achieved by using oxygen overnight, and for several hours during the day.

An oxygen concentrator is a machine about the size of a bedside table. It filters oxygen from air in the room and plugs into your ordinary household electricity supply. The oxygen is then delivered by plastic tubing to a nasal cannula or a mask. Long tubing can be fixed around the floor or skirting board, with outlets upstairs and downstairs so that you can have oxygen around the house.

If you are prescribed an oxygen concentrator, your doctor will notify the company, which supplies them for the NHS in your area. An engineer from the company will install the concentrator and discuss with you the best place to put the machine and the tubing. This engineer will also explain to you and/or a friend or relative how to use the concentrator and answer any questions you have. The machine is very quiet and compact and uses normal electricity. The supplier of your oxygen service will reimburse some money towards your electricity bill to pay for the supply, which the concentrator uses. A 'back-up' cylinder of oxygen is also provided in case of breakdown and the engineer will visit regularly to make sure the concentrator is working correctly.