

Respiratory Department

Home oxygen: a patient's guide to how oxygen is delivered

Introduction

Supplementary oxygen therapy can be supplied in three ways:

- Oxygen concentrator – an electric machine that filters oxygen out of the air. Concentrators generate oxygen using electricity so do not need to be refilled.
- Oxygen cylinder – these can be large or small enough to carry. Cylinders contain oxygen gas and need to be refilled when empty.
- Liquid oxygen – a large container of oxygen in liquid form – this can be transferred into smaller containers and breathed as a gas.

All equipment must be used in accordance with the manufacturer's safety instructions. In particular, never smoke near to oxygen equipment and keep it away from all sources of fire. It is very important that you do not alter the oxygen flow rate on your equipment. Oxygen can be helpful when used correctly but too much oxygen can be dangerous.

For an up-to-date summary of oxygen equipment please visit the Baywater website:

www.baywater.co.uk/patient-carer/our-therapies/oxygen/oxygen-for-adult-patients/equipment



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Oxygen Concentrators



If you have been prescribed Long Term Oxygen Therapy (LTOT), you will probably be given a **static oxygen concentrator**. This will only work when plugged into an electric supply and switched on. Static concentrators provide a continuous flow of oxygen and can be used during the daytime and overnight. Most concentrators have a filter at the back of the machine which should be cleaned with soapy water once a week. It will need to dry completely before being put back into the machine so Baywater will supply you with a spare filter to use in the meantime.

If you are prescribed ambulatory oxygen therapy (AOT) to use when walking and exercising then you may be given a **portable oxygen concentrator**. Portable concentrators have rechargeable batteries so can be used outside of your home. Most portable concentrators provide *pulsed* oxygen. This means that oxygen is only supplied when you breathe. These concentrators are designed to use when you are moving around. They should **never be used when sleeping**.

Oxygen can be delivered via nasal cannula (two prongs which sit at the base of your nostrils) or face mask. The home oxygen team will discuss this with you at your initial appointment.

If you use oxygen in your home, it can be piped in. This means that the long oxygen tubing is fixed around the floor or skirting board, with outlets upstairs and downstairs so that you can access oxygen around the house. This reduces the amount of loose tubing on the floor and reduces the risk of trips or falls. Baywater can also provide high visibility tubing; this can be helpful if your sight is impaired.

An engineer from Baywater Healthcare will assess your house and install the concentrator. They will discuss with you the best place to put the machine and the tubing. The engineer will also explain to you and/or a

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friend or relative how to use the concentrator and answer any questions you may have.

Oxygen concentrators use electricity and Baywater Healthcare will reimburse you for any electricity your machine uses. Please contact Baywater to arrange this reimbursement.

If you use long term oxygen therapy, a 'back-up' oxygen cylinder is usually provided too. This should be used if there is a power cut and your concentrator loses power. Back-up cylinders will last for several hours and can be used while you make alternative arrangements.

An engineer from Baywater Healthcare will visit you regularly to make sure that the equipment is working properly.

Oxygen Cylinders



If you are prescribed oxygen to use when walking (ambulatory oxygen therapy) then you are likely to be given oxygen cylinders.

Oxygen cylinders contain compressed medical grade oxygen. Again, oxygen is delivered via nasal cannula or face mask.

Standard portable oxygen cylinders weigh 3-4 kg and lightweight portable oxygen cylinders weigh 2-3 kg. As they are bigger, standard cylinders contain more oxygen and will last for longer than lightweight cylinders. Most portable cylinders come with a conserver device; your oxygen specialist will decide if you require one and order it for you. A conserver device attaches to the oxygen cylinder to make the oxygen supply last longer.

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The conservator 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.

Baywater can provide you with a backpack or a collapsible, lightweight trolley to carry oxygen cylinders. If you would like one of these, please contact the Home Oxygen Team and we will arrange one.

Liquid Oxygen



If you use portable oxygen therapy very frequently, if you work full time or if you need a very high oxygen flow rate and your cylinders are not lasting long enough, we may recommend that you use liquid oxygen. This is normal oxygen supplied in liquid form.

Before installation, a Baywater engineer will visit you at home to assess suitability. You will have to have good manual dexterity as you need to refill the cylinders yourself and your house needs to be well ventilated. As liquid oxygen has to be delivered by lorry and decanted into a tank in your home, it is not always an option; for example, if you live in a flat above ground level. The Home Oxygen Team and Baywater engineers will work with you to determine whether or not liquid oxygen can be safely supplied.

Travelling with Oxygen

If you plan to travel or go on holiday with supplementary oxygen therapy then you may need to plan in advance. For travel in England and Wales, please contact Baywater Healthcare. For information about travelling elsewhere please contact the Home Oxygen Service.

Patient Information

Other useful contact details

Baywater Healthcare: 0800 373 580

British Lung Foundation: 03000 030 555 (Mon-Fri: 9am-5pm);

www.blf.org.uk

If you have further questions or have a problem with your oxygen prescription, please contact the Home Oxygen Service on 024 7696 6734 or email:

uhc-tr.Oxygen-Service@nhs.net

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6734 and we will do our best to meet your needs.

The Trust operates a smoke free policy

To give feedback on this leaflet please email feedback@uhcw.nhs.uk

Document History

Department:	Respiratory Physiology
Contact:	26734
Updated:	March 2021
Review:	March 2023
Version:	4
Reference:	HIC/LFT/1456/12