

Long term oxygen therapy (LTOT)

Information for patients,
relatives and carers

This leaflet provides information to patients and their relatives/carers about the use of long term oxygen therapy (LTOT) at home.

What is oxygen?

We breathe in oxygen to nourish the body's cells and breathe out carbon dioxide, the body's waste product.

In some patients with chronic lung disease, the oxygen levels in the blood may gradually decrease over a long period of time. Because it happens slowly the body will adapt, but eventually the consistent low levels of oxygen puts a strain on other organs. In some patients, carbon dioxide levels may also be raised due to the lung's inability to remove it from the body effectively.

What should I expect at the assessment appointment?

You have received an appointment to complete an assessment of your oxygen requirements. Oxygen levels can be easily monitored using a 'pulse oximeter' – a small, painless probe that fits over the end of your finger. This must be done when you are reasonably well, i.e. not when you are getting over a chest infection and ideally eight weeks after finishing a course of steroids and/or antibiotics.

The oxygen assessment is done on two separate appointments. The first appointment consists of monitoring your body's oxygen levels by taking a blood sample from your wrist or ear lobe. A decision is then made about need for oxygen and if further appointments are required.

If a second appointment is needed, the blood test is repeated and if the oxygen level remains low, you will be given oxygen for 40 minutes.

Your oxygen levels are then checked again with a further blood test.

If the oxygen level in your blood is below a certain level on two occasions when you are stable, we may recommend that oxygen be taken for a minimum of 16 hours a day/night (LTOT).

This is a treatment, in the same way as taking tablets or using inhalers; it will not necessarily improve your level of breathlessness. Although 16 hours seems like a long time, it is not necessary to use

the oxygen continuously; the total time can be used over the course of the day and night, giving time off during the day.

How is the oxygen delivered at home?

Oxygen at home is delivered via a machine called an oxygen concentrator. The machine is about the size of a bedside table and concentrates oxygen from the air in the room. It plugs into the mains electricity and uses around 350 watts of power (about the same as four 100w light bulbs). The cost of the electricity used is reimbursed to you by the oxygen provider.

Tubing from the concentrator is placed around the house temporarily. A more permanent installation can be installed at a later date. The oxygen is then administered to you by a face mask or nasal cannulae. A back-up oxygen cylinder will be supplied in case of emergency, such as a power cut. A portable cylinder may also be prescribed if after assessment you think you would benefit from using oxygen outside your home.

It is important that you do not alter the oxygen flow rate beyond that prescribed for you, as this can be dangerous. If you feel that your medical condition is worsening, please seek help from your GP or the community respiratory team.

What happens next?

The respiratory nurse will visit you at home 4-6 weeks after the oxygen concentrator is installed. After that, you will be referred to the community respiratory team for appropriate, continuing follow-up.

If you are planning a holiday, call Vivisol to make arrangements for oxygen to be provided. Trips abroad will incur a payment.

Oxygen and smoking

If you smoke, then oxygen therapy may not be provided as this is a safety hazard. Other people must also refrain from smoking in the house, in the vicinity of the machine or any oxygen outlet. Keep the oxygen away from sources of heat and

ignition, and clear from any covers and curtains. Tubing and cylinders may present tripping hazards – please take care. Electronic cigarettes should not be used while wearing the oxygen. Batteries of electronic cigarettes should not be charged in the vicinity of any source of oxygen.

Your home oxygen supply:

Device: _____

Flow rate: _____ Hours per day: _____

If you develop headaches, new confusion or increased daytime sleepiness, contact the Oxygen Assessment Service on 0118 322 7159 Monday to Friday 8am to 5pm.

If we have not responded within 4 hours please contact your GP or out of hours GP.

Follow up planned: _____

Respiratory Clinical Nurse Specialist: _____

Home Oxygen Assessment Nurse: _____

Your oxygen company is: **Vivisol**

They can be contacted on: **0800 917 9840 (24 hour line)**

Please contact them for any problems or queries regarding oxygen.

Contact numbers

Department of Respiratory Medicine

Telephone: 0118 322 7159 Mon-Fri 8.00am – 5.00pm

Clinical Admin Team (CAT 11) Telephone: 0118 322 6676

Mon-Fri 8.00am – 6.00pm or email rbb-tr.cat11@nhs.net

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.