Oxygen

Oxygen is needed by the body for all living processes. Oxygen may be recommended for people with lung disease to:

1. Help relieve breathlessness
2. Prevent strain on the heart
3. Prolong life expectancy
4. Reduce hospital admission
5. Improve quality of life
6. Help increase activity levels
7. Help you sleep better

There is means-tested government financial assistance available for the cost of oxygen when a specialist prescribes it and the level of the oxygen in your blood is significantly reduced. Home oxygen is usually prescribed for 16-19 hours per day. Portable oxygen may also be recommended for going out.

You need to use your oxygen during sleep and during activities such as walking, showering and eating.

- Many people resist using their oxygen because they fear it will reduce their independence or they will become addicted. In fact, oxygen therapy improves your energy level for walking and activity performance and to assist you breathing and thus your enjoyment for life will be improved.

- In fact, using Oxygen as prescribed has been proved to help you live longer and better.

Not every patient requires oxygen. Your doctor decides if you need oxygen. Tests which may be performed include blood tests, sleep study or monitoring everyday activities. You must have stopped smoking to have home oxygen. As oxygen is a drug it will be your doctor’s decision when to prescribe it. You must understand your doctor’s prescription before you leave the hospital and never increase the flow rate without Medical advice.

Oxygen can be delivered in a variety of ways including:

- A large cylinder
- A small or a medium size portable cylinder with a conserving device.
- A large stationary oxygen concentrator for home use.
- Small portable/mobile concentrators for walking & traveling out of your home.

The number of hours your oxygen cylinder lasts will depend on the size of the cylinder and its usage. A conserving device increases the hours of use, with a pulse-dose of Oxygen only when you breathe in.
Oxygen Concentrators

An oxygen concentrator is a large electrical device which filters oxygen from the air. It is plugged into a power point in the home. The machine concentrates the oxygen in room air to the set level of oxygen prescribed by your doctor. If oxygen is to be used for several hours a day and over a long period of time, it is a more economical way of buying your oxygen. Smaller portable concentrators are now available.

Cleaning and Maintenance of Oxygen Concentrators
The concentrator should be kept free from dust with regular cleaning with a damp cloth. It should be placed in a well-ventilated area in the centre of the house to allow for mobility when using oxygen.

Filters: Check the filter at the back of the machine each day. If dirty, wash and rinse under the tap, towel dry and replace. The providing company should service the concentrator every three months.

Humidifier: When using oxygen continuously, it can be very drying on the nasal and oral mucosa. (If the flow rate of oxygen is low this is not a problem and a humidifier is not required.) A humidifier is a plastic container about the size of a large glass, which is filled with water. This moistens the oxygen that you breathe. You need to clean your humidifier each day by washing it with warm soapy water and rinse it under the tap. The container must be refilled with boiled (cooled) water from the kettle. It is important that the humidifier is cleaned regularly as the moist environment can breed infection if not cleaned. Cost to buy is $10 plus delivery, from your Oxygen supplier.

Nasal Cannula and Tubing
Nasal prongs are used to deliver the oxygen through your nose. The nasal prongs are connected via tubing, usually 9m to the oxygen concentrator, shorter to a cylinder. Your nasal cannula and oxygen tubing should also be cleaned with warm soapy water and rinsed under the tap. Nasal prongs should be replaced every month or when they become dry and hard and particularly after any respiratory infection. If you develop sore nostrils from wearing the nasal cannula you may wish you consider purchasing a nasal cup, which sits over your nose and works exactly the same as nasal prongs.

Maintenance of Concentrator
A skilled technician should service your oxygen concentrator every 3 months. If this is not happening, please contact the providing company. For all other information regarding your concentrator please read the literature provided or ring the providing company.
Portable/ Mobile Oxygen

Exercise capacity is increased by additional oxygen benefit from portable cylinders. Most elderly patients cannot carry even light-weight cylinders so make use of a small trolley or we can prescribe an Oxy walker, or a 4 Wheel Shopper Walker or a Rollator frame which has a basket to carry the cylinder.

It is very difficult to get funding assistance for portable oxygen and if you are unsuccessful in gaining funding you can still discuss with your doctor and family if you wish to privately pay for portable oxygen. Oxygen supplier details are on page 9 of this booklet. If you choose to do this the oxygen supply company will require a letter or script from your Doctor.

Conserving Devices
In order to get these small cylinders to last longer before needing a refill, they can be fitted with a conserving device. These simple battery-operated devices control the flow of oxygen from the cylinder to the nasal prongs. They conserve oxygen by delivering a short pulse of oxygen only when breathing in, rather than continuously as with normal oxygen supply systems, thus oxygen is not wasted while breathing out. This prolongs the time each oxygen cylinder lasts by at least 2 to 3 times.

Keep spare batteries for the conserving device available in the Carry bag pocket. Keep track of time using the cylinder O2 and watch the gauge; Green (full) to Red (empty).

Refills:
When you get your “refill” the oxygen bottles are usually swapped over so the integrity of the bottle is maintained by the supplying company so you must get your refill at the company supply outlet. These are generally pharmacies. In rural areas pharmacies do not provide refills – they come from the supplier or outreach service centres (stock and station agents)

Cost:
The Refills cost vary from company to company but are generally $15 to $25 for the smaller sized cylinders.

Cylinder Duration:
The number of hours your oxygen cylinder lasts will depend on the size of the cylinder and its usage. Please check with your oxygen company the length of time your cylinder will last with the amount of oxygen you use. If there is a conserving device attached to your cylinder the oxygen will last longer check with your doctor if this is a possibility.

Portable Concentrators
Several Portable Concentrators are now available for private purchase from the Oxygen companies. They are expensive, around $6,000 or more but also available second hand. All have different advantages and disadvantages so seek professional advice before purchasing or hiring to go on a trip.
Safety Issues

1. Nobody must smoke in the house or unit, as oxygen is flammable.

2. Use in a well-ventilated room at least a metre away from walls and curtains.

3. The oxygen concentrator and tubing must be kept at least 2 metres away from heat sources such as heaters and stoves (both gas and electric), while sitting and walking through the house.

4. Do not alter the flow rate on the concentrator.

5. Do not put anything on top of or over the concentrator.

6. The concentrator should be the only piece of equipment plugged into a power point. Double adapters are dangerous and only new, tightly fitting power boards can be used temporarily while an additional power point is installed.

7. Oxygen should not be worn when using gas or electric stoves, BBQs or hairdryers and electric shaver as they ‘spark’. Also oxygen should not be worn when taking part in hobbies which also include “sparks” or flames such as welding.

8. Nasal prongs should be worn when showering except when a gas hot water heater system has a naked flame pilot flame in the bathroom.

9. Do not apply oil based face cream, moisturizers or hair spray whilst wearing the nasal prongs.

10. When you are not wearing your nasal prongs turn off the oxygen.

11. To prevent you and your relatives falling:

   - When you walk away from the concentrator throw the tubing over your shoulder to prevent tripping over the tubing.

   - When walking back toward the concentrator coil the tubing like a hose to keep it off the floor.

12. If your nostrils are sore and dry, do not use Vaseline or Oil-based creams. Use water-based creams e.g. Sorboline and Vitamin E Cream.
Car Travel

1. The Roads and Traffic Authority require you to drive wearing oxygen once you have permission from your Doctor that you are safe to drive. Make sure you recover your breath after walking to the car, before starting your car.

2. The cylinder must be secured safely over the front car seat with the carry bag strap or using a seat belt. If the cylinder has a conserving device attached, it may be laid down, other wise it must be kept upright.

3. Keep a window slightly open to prevent a build up of oxygen.

4. You can transport a concentrator in a car. It must be in an upright position and secured by a seat belt or upright in the boot.

5. A portable concentrator is plugged into the ‘lighter’ socket for power and should be strapped to the front seat or secure under the dashboard.

Air Travel

There are several considerations regarding safe air travel which you must abide:

1. NB. If you are travelling overseas or interstate you will need to arrange oxygen at your destination ahead of time. Your current oxygen supplier can assist with arrangements.

2. Discuss with your Respiratory Specialist if you intend to travel by plane as your oxygen flow rate prescription may need to be altered. You may need to have a further medical assessment prior to flying, as pressurised aircraft cabins have less oxygen at high altitudes. If your oxygen level is reduced, you may need oxygen on the plane even if you do not need it at home.

3. Your doctor must complete a medical form if oxygen is needed and you must inform the airline you need oxygen. You will need medical clearance and a form completed ahead of time before booking.

4. Some airlines will supply portable oxygen cylinders for a fee or allow you to supply your own cylinder but it must be approved in advance and have an airline carry bag available from your oxygen supplier.

5. If you own or hire a portable concentrator you should ask, when booking, if your portable concentrator can plug into a power outlet and also recharge. You will need sufficient battery ‘time’ to last the plane trip and car/ taxi trip to your destination.

6. You must be self sufficient in managing your own oxygen and aware of avoiding anyone smoking close to you.

7. When booking your ticket you need to inform the airline that you will require a wheelchair and assistance on and off the plane as you will always have to walk long distances at an airport. The wheelchair is only kept at the ticket desk and you need to
get to the ticket desk from your car / taxi by yourself or get help to walk or have someone go and get the airline chair at the ticket counter to bring to your car.

Electricity Supply and Rebate

Advise your energy supply company so that where possible your electricity will be maintained *however you must call them with your account details*. Electricity supply is not guaranteed during unexpected electricity failures.

Energy companies state you can claim a monetary rebate towards the running costs as your concentrator runs on electricity.

Energy Australia (ph: 13 15 35) application forms can be located at:

Financial Information

If you have a medical condition, which requires treatment with oxygen therapy at home, the hospital will arrange the delivery of appropriate equipment for you when you are discharged from hospital.

If you satisfy the medical criteria for home oxygen, the hospital will pay the rental cost of the concentrator for **ONE or THREE** months, depending on the type of oxygen account. At the end of this rental period (taken from the date it is received at your residence) ongoing rental fees may become your responsibility.

Some patients may be eligible for financial assistance, although most assistance will be means tested. Financial assistance can be applied for from the following sources:

1. **Enable**
   This is a government funded financial assistance program administered by your hospital. Your Respiratory/ Sleep physician can make an application to Enable, but all applications require the patient to fill out the application form, sign it and supply a copy of their Medicare and pension cards.

   If your application is successful (Enable will send you a letter) Enable will take over the rental cost of your equipment from the approval date but you will be required to abide by the Enable agreement.
For patients going home on oxygen the Enable application form should be completed prior to discharge from the hospital, and Enable require you to attend follow up appointments at 4-8 weeks and then yearly with your Respiratory/ Sleep physician. If you do not attend these appointments your funding will be cancelled.

The process of applying for Enable financial assistance can take time. Please allow a minimum of four weeks for the processing of an application. If you have not heard from Enable within 30 days or receive a letter from the oxygen company stating that they are going to remove the oxygen, please contact your Respiratory/ Sleep physician or Enable directly to find out why.

EnableNSW Contact details: 1-800-ENABLE (1-800-362-253)
Mail: Locked Bag 5270 Parramatta NSW 2124
Phone: 1 800 ENABLE (1 800 362 253)
Fax: 02 8797 6543
E-mail: enable@hss.health.nsw.gov.au

2. Department of Veterans affairs
DVA will usually provide all prescribed equipment and DVA applications incur similar processing time as Enable but use the supplier contracted by Veterans affairs.
Tele: (02) 9364 7476 for NSW & ACT

3. Dust Diseases Board
DDB will usually provide all prescribed equipment and DDB applications incur similar processing and time to Enable. Information can be found at http://www.ddb.nsw.gov.au/MakingaClaim/MedicalExpenses/Pages/default.aspx
Mail: Dust Diseases Board, Level 2, 82 Elizabeth Street, Sydney NSW 2000
Phone: Toll Free: 1800 550 027 or (02) 8223 6600
Fax: (02) 8223 6699
Lung Bus: 1800 727 333
E-mail: enquiries@ddb.nsw.gov.au

4. Private Health Funds
Financial contribution usually depends on which fund you belong to, your level of cover and length of time in the fund.

5. Self Funded
Some patients may NOT be eligible for financial assistance via the abovementioned and will therefore have to self fund the oxygen equipment. If you have been unsuccessful in obtaining financial assistance for the equipment and you are unable to proceed with treatment because you cannot afford it, it is important that you discuss this with your Doctor.

Suppliers of oxygen are listed on page 9 of this document.
Common Questions

Can I increase my oxygen when I am ill?
– You can use it for *more hours a day* but you **must not increase the flow rate** from your Specialist Doctors prescription.
– If you are feeling unwell call an ambulance, your GP or your Respiratory outreach team.
– If you are using the oxygen more hours per day you should see your GP or respiratory specialist as this may be a sign that you are becoming unwell.

Can I wean myself off oxygen?
– No. You must discuss this with your doctor who will make this decision based on further test results.
– The oxygen is a treatment for your lungs, body and brain which only achieves best results if you use it for at least 16 to 19 hours a day.

What do I do if the Concentrator breaks down?
1. This will depend on your circumstance and if you need oxygen continuously or intermittently. If this creates an urgent situation for you then:
   – Call an ambulance 000
   – Use your portable cylinder whilst waiting for the ambulance -if you have one

2. If you can safely have periods off your oxygen:
   – Sit quietly and call the Supplier on the Emergency phone number. The emergency phone number will be located on the top of the Concentrator.
   – Ask the supplier when they will be able to come to fix your oxygen as *you may need to call an ambulance if they are going to be longer than you can go without oxygen.*

3. Remember, the supplier will come to fix or replace your concentrator but look after yourself first by deciding if you need to call an ambulance and then deal with the concentrator.

4. In the event of a prolonged power failure contact your local council or the **SES** who may be able to provide a portable generator until the power returns.
Supplier Contact Details

If you pay for your own oxygen, you can ‘shop around’ but the companies from which you can purchase oxygen will require a letter (or prescription) from your doctor. Suppliers of oxygen are:

**Air Liquide**, Unit 5/476 Gardeners Road, Alexandria 2015
Phone: 1300 360 202

**BOC**, PO Box 247, Parramatta 2124
Phone: 131262 (business hours), 1800 050999 (Oxycare)

**DeVilBiss Medical**, Unit 7/15 Carrington Rd, Castle Hill 2154
Phone: 9899 3144

**Inspiration Healthcare**, Greg Tyre, Oxygen Broker. Phone: 0417218989

**Independent Living Specialists**
Telephone: 1800 008 267 or 9427 4995
1300 008 267

**Medical Industries Australia**
C2/ 16 Mars Rd, Lane Cove NSW 2066, Australia
☎ (02) 9490 6200

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1 Accurate as of August 2011