Long term oxygen therapy

FACT SHEET prepared by The Asthma and Respiratory Foundation NZ

Long term oxygen therapy (LTOT) is prescribed for people who have a low level of oxygen in their blood and not for everyone who is short of breath. It can be dangerous if it is not required, or properly prescribed.

Will oxygen help me?
Some people with COPD develop low levels of oxygen in their blood — oxygen can be used as a treatment to help improve this. Being short of breath may mean that you are short of oxygen but this is not always the case. Alternatively, your breathing could feel comfortable but your oxygen levels may be low without you noticing this – therefore, oxygen is only helpful as a treatment for some people with COPD.

If your general practitioner feels that you will benefit from oxygen therapy, you will be referred to a respiratory specialist. You will be asked to undertake lung function tests (breathing tests) and have special blood tests to measure the level of oxygen in your blood.

For further information on the treatment of COPD see the fact sheet “What is COPD”, the booklet “Breathe easier with COPD” or visit our website asthmaandrespiratory.org.nz

Why is oxygen prescribed?
Oxygen treatment is given to people with COPD for the following reasons:

- As an emergency treatment (short term) when a person who is suffering a COPD attack (also called an ‘exacerbation’) is admitted to hospital with low oxygen levels in the blood.

- As a long term treatment at home, when a person with severe COPD continues to have low oxygen levels in the blood (also called ‘hypoxemia’). Having low levels of oxygen all the time like this can put extra stress on your heart and blood – for maximum benefit, oxygen should be used for 24 hours a day or for at least 16 hours per day to be effective.

- As a portable treatment that you can use when you are away from your home (called ‘ambulatory oxygen’). The oxygen will come in small cylinders that last for several hours and can make shopping or travelling easier.

What are the benefits of using oxygen?
The use of oxygen may benefit you by:

- Prolonging life by preventing heart strain
- Improving the way, you feel and think
- Making you feel less short of breath with exercise
- Helping you to tolerate exercise better
- Resulting in fewer hospitalisation days
It is important to understand that the amount of oxygen you are prescribed (the flow rate) is carefully calculated depending on your oxygen blood levels. You must not change this.

You may be on oxygen therapy for a few weeks or months, or for the rest of your life. It all depends on why you need it and you will need to have future checks to measure the amount of oxygen in your blood.

**How will my oxygen treatment be prescribed?**

Oxygen therapy is generally given via a cylinder containing oxygen in it or an electrically operated machine that uses the oxygen in the air at your home (called an oxygen concentrator). Your specialist will talk with you about which of these are best for you.

You breathe in the oxygen through small, soft plastic tubes that fit just inside your nostrils (called nasal ‘cannulae’), or through a mask, that covers the mouth and nose. Nasal cannulae are most often used for home use, as they do not interfere with talking or eating. The tube from the oxygen machine or cylinder is very long so you will be able to move around your home while connected.

The oxygen therapy works only while you use it. When you take off your oxygen mask or remove the cannulae, your blood-oxygen level will drop within a few minutes — it is therefore important to use the oxygen for the amount of time that has been discussed with you by your specialist. Like any other prescription medicine, oxygen must be used carefully. You need to follow instructions and follow all the safety precautions. Be sure you get instruction on how to use your oxygen, and how to clean your equipment.

Learning how to use and care for the oxygen equipment may seem complicated. When it is first delivered to you a demonstration will be given. If you’re not clear on something, keep asking questions until you feel confident. For more support, have a family member or caregiver learn about your equipment as well.

For your own safety, you can’t use oxygen if you smoke and your specialist will not be able to prescribe you oxygen if this is the case. No one can smoke within three metres (10 feet) of an oxygen delivery system, because of the risk of fire. You can’t use oxygen anywhere near an open flame (candle, fireplace, heaters or other electrical appliances). Think about putting a ‘NO SMOKING’ sign on your front door to keep you and your family safe.

**What should I do after starting on oxygen treatment?**

Keep in touch with your doctor: Have your doctor check your prescription at least once each year, or if your symptoms change, to see if your oxygen prescription still meets your needs. Let your house and car insurer and your electricity supplier know that you have been prescribed oxygen treatment.

Keep contact telephone numbers for your doctor and oxygen supplier to hand in case of problems.

Remember you can ask your doctor about advice for when you travel or need to fly. Getting the most out of life with COPD means being as active as you can. Your oxygen prescription can help you do this.
The Asthma and Respiratory Foundation NZ can help you

The Asthma and Respiratory Foundation NZ is New Zealand’s not-for-profit sector authority on asthma and other respiratory illnesses. We advocate to government and raise awareness of respiratory illnesses, fund research for better treatments and educate on best practice.

Check out our comprehensive website at asthmaandrespiratory.org.nz

References
COPD Australian and NZGuideline - asthmafoundation.org.nz/nz_guidelines.php

British Lung Foundation COPD information guide for patients: blf.org.uk/support-for-you/copd

Patient UK - patient.info/doctor/use-of-oxygen-therapy-in-copd

Cochrane review 2008

NICE COPD guideline – CG101 - nice.org.uk/guidance/CG101

British Thoracic Society Oxygen Guidelines - brit-thoracic.org.uk