



What you need to know about...

Oxygen Therapy

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There are changes that occur in the lungs of COPD patients. Two large changes are the narrowing of the airways and the destruction of lung tissue. These changes may contribute to poor gas exchange and can make it harder for patients to breathe. Therefore, the amount of oxygen that reaches the blood is not enough to meet the body's needs. Oxygen therapy can help control this problem efficiently.

Signs and symptoms

There are signs and symptoms which should alert patients to the possibility of using supplemental oxygen and prompt them to visit a healthcare professional. These signs and symptoms are:

- Shortness of breathe
- Decreased exercise tolerance
- Fatigue and dizziness

Measurement of oxygen levels

Doctors will be able to tell if someone needs supplemental oxygen by measuring the blood oxygen level. There are various tests that are used:

- Arterial blood gas (ABG) test measures the oxygen levels

- An oximeter is a device which shines light through the finger and measures the amount of light absorbed by the oxygen carrying hemoglobin in red blood cells

Benefits of oxygen

More than 15 hours per day of oxygen administration to patients with chronic respiratory failure has been shown to increase survival and improve quality of life. Oxygen therapy also improves exercise capability, sleep, and cognitive performance.

Types of oxygen systems

The *oxygen concentrator* is the most commonly used system at home. It produces oxygen by concentrating the oxygen that is already in the air and eliminates other gases.

There are also *compressed oxygen cylinders* which are small enough to be carried in small side pack and weigh less than eight pounds. Oxygen supply lasts between four and eight hours depending on the patient's oxygen requirements.

Liquid oxygen systems allow larger amounts of oxygen to be stored in smaller, more convenient containers than compressed oxygen. However, liquid oxygen cannot be kept for a long time because it will evaporate.