



PULMONOLOGY CLINIC

NICOSIA GENERAL HOSPITAL

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Oxygen Therapy at home



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What is Home Oxygen Therapy?



Home Oxygen Therapy refers to the use of supplemental oxygen by patients who are not hospitalized but require oxygen support to function better both physically and mentally.

For patients who need it, home oxygen therapy alleviates symptoms of breathlessness and protects the body from the harmful effects of oxygen deficiency in the tissues.

How valuable is Oxygen?

Oxygen is essential for life. Atmospheric air contains approximately 21% oxygen, which is sufficient for health individuals to meet all physiological needs.

Patients with respiratory conditions may have lower-than-normal oxygen levels in their bodies. As a result, some of them may require home oxygen therapy – meaning the administration of additional supplemental oxygen.



Which conditions require Home Oxygen Therapy?

Patients with Chronic Obstructive Pulmonary Disease (COPD), Pulmonary Fibrosis, Cystic Fibrosis, Pulmonary Arterial Hypertension and severe Heart Failure may require supplemental oxygen at home.

When will a Physician recommend Home Oxygen Therapy?

A Physician will determine the need for supplemental oxygen based on arterial blood gas analysis or by measuring peripheral blood oxygen saturation using a pulse oximeter.

If oxygen levels are found to be below the desired threshold, the Physician will prescribe oxygen therapy with the goal of maintaining peripheral oxygen saturation at 90% or higher.

How should oxygen be used?

When oxygen therapy is prescribed, the Pulmonologist provides clear instructions regarding the required dosage of supplemental oxygen, which must be followed carefully.

Administering less oxygen than prescribed can lead to hypoxia in the brain and heart, resulting in fatigue, concentration difficulties, memory loss, myocardial infarction, and stroke.

Conversely, administering higher-than-recommended oxygen concentrations may damage the lungs and worsen pre-existing respiratory conditions.



How long should Oxygen Therapy be used?

Some patients will require oxygen therapy for life, while others may need it for a shorter period.

This decision is made by the physician during regular follow-up and may be adjusted as needed.

In certain cases, patients may require supplemental oxygen throughout the day; in other, only during sleep or physical exertion.

The physician will determine how many hours per day and under which conditions the patient should use supplemental oxygen.

Precautions when using Oxygen at Home



- Patients must not discontinue or modify their oxygen therapy without approval from their physician.
- Smoking while receiving supplemental oxygen is strictly prohibited. It may cause an explosion and result in severe burns.
- Oxygen equipment should be kept at least two meters away from any open flame or heat source.
- Oxygen cylinders must be securely stabilized in the home to prevent accidents due to tipping or falling.

Types of Oxygen Therapy

- Oxygen concentrator: a specialized device that generates oxygen and operates on electricity or battery power
- Liquid oxygen stored in a metal cylinder
- Compressed oxygen gas stored in large or small metal cylinders

Oxygen is delivered to the patient either through a nasal cannula or specialized oxygen therapy masks.

Can Patients on Oxygen Therapy Travel?

Yes, they can – provided they arrange for oxygen supply during the flight with the airline and ensure access to oxygen at



their destination.

