

What is oxygen therapy?

Oxygen therapy is the use of oxygen for medical purposes, treatment. This may include low blood oxygen levels, carbon monoxide toxicity, cluster headaches, and maintenance of adequate oxygen while inhaled anesthetics are administered. Long-term oxygen is often helpful for people with chronically low oxygen levels, such as those with severe COPD or cystic fibrosis. Oxygen can be administered in a variety of ways, including inside the nasal cannula, face mask, and hyperbaric chamber.

Oxygen is required for normal cellular metabolism. Too high a concentration can cause oxygen toxicity, such as lung damage, or cause respiratory failure in predisposed individuals. Higher oxygen concentrations also increase the risk of fire, especially during smoking, and can dry out the nose without wetting. The recommended target for oxygen saturation depends on the condition being treated. In most cases, saturation is recommended at 94-96%, while those at risk of carbon dioxide retention prefer 88-92%, and those with toxic effects on carbon monoxide or cardiac arrest should be as high as possible. Air usually contains 21% oxygen by volume, while oxygen therapy increases it by a certain amount up to 100%.

The use of oxygen in medicine became widespread around 1917. It is included in the list of the most important medicines of the World Health Organization. The cost of home oxygen is about \$ 150 a month in Brazil and \$ 400 a month in the United States. Home oxygen can be provided either by oxygen tanks or by an oxygen concentrator. Oxygen is considered to be the most common treatment in hospitals in the developed world.