

Oxygen Therapy Saves Lives

As Alpha-1 lung damage progresses, your lungs can't exchange oxygen well. This results in [hypoxemia](#) — low levels of oxygen in your blood. The long-term effects of hypoxemia are severe and life-threatening. To prevent them, your doctor may recommend adding oxygen therapy to your Alpha-1 COPD treatment plan.

Effects of low oxygen

Low oxygen levels affect your body in different ways.

Lungs & heart: When your blood oxygen levels drop, the vessels in your lungs constrict, or narrow. This causes *pulmonary hypertension* or high blood pressure in the arteries feeding your lungs.

Now, your heart has to work much harder to pump blood through your lungs. Over time, this strain can cause the heart to dilate, weaken, and eventually fail. Known as *Cor Pulmonale*, this right-sided heart failure can be directly caused by lung disease.

Blood cells: Red blood cells, especially *hemoglobin*, carry oxygen through your body. When your blood oxygen levels fall, the number of those red blood cells increases (*polycythemia*). That's your body's way of trying to get more oxygen to your tissues and cells. An increase in red blood cells can cause blood clots, headaches, and high blood pressure.

Brain: Low blood oxygen has negative effects on your brain, lowering your ability to

- concentrate
- remember things
- use abstract reasoning and solve problems
- speak clearly
- perform tasks that require gross or fine motor skills, like driving or typing

Overall benefits of oxygen therapy

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A longer life: Oxygen therapy can reverse the negative effects of low blood oxygen and improve survival rates. Research studies on people with severe COPD show that more daily hours of oxygen therapy result in more positive health effects. In one study, long-term oxygen therapy increased life span by as much as 6-7 years.

A better life: You don't just want to live longer. You want to live as well as you can, for as long as you can. Oxygen therapy helps you do that, by letting you stay active with less shortness of breath. People who use supplemental oxygen can [exercise longer and harder](#), which leads to greater overall fitness.

Oxygen therapy has many other positive effects that make life more pleasant. It boosts

- your ability to think and remember
- mental alertness
- physical stamina
- mood
- restful sleep

The benefits of oxygen therapy are numerous and profound!

For more in-depth information on this topic, please visit the [Big Fat Reference Guide \(BFRG\)](#). If you are enrolled in AlphaNet's Subscriber Portal, you can access the BFRG [here](#).