



# How Will Supplementary Oxygen Affect You?

by RUSSELL WINWOOD

---

## Oxygen Therapy for COPD

*With contributions from Eric Patterson and Krystina Ostermeyer.*

Chronic obstructive pulmonary disease (COPD) makes breathing a struggle, and when breathing is problematic your body struggles to reach the desired level of oxygen in the blood. Your body's organs depend on that oxygen to provide energy — without it your body shuts down.

With the breathing difficulty that is a keystone to COPD, many patients experience symptoms that warrant their doctor prescribing COPD oxygen therapy. Oxygen therapy is the use of an oxygen tank to supplement the oxygen your lungs are able to use from the air. A higher concentration inhaled equals more oxygen available in your body.

Whether you're a newly diagnosed COPD patient or a COPD veteran, chances are if you haven't already, at some stage it's likely you'll need supplementary oxygen. For many of us this can be a daunting proposition and we can be filled with thoughts of doom and gloom.

How will affect me? Is this the beginning of the end? What will people say? These are just some of the questions that flashed through my mind.

When you are first prescribed COPD oxygen therapy, take your time learning about how to use it. Read the instructions carefully and research online.

These devices are designed to be user-friendly and as comfortable as an oxygen tank can be, but it pays to be knowledgeable. Talk to your family and friends and communicate your thoughts and feelings about oxygen therapy so they understand and know what they can do to help.

Don't stop using your oxygen if it feels awkward or uncomfortable. Your doctor prescribed a specific flow of oxygen per minute, and you should use it exactly as recommended.

If you are worried you may run out of oxygen consider oxygen conserving devices (OCD). They are used with a tank or oxygen concentrator so oxygen is delivered only when you inhale, making the supply of oxygen last longer. Make sure you get the oxygen saturation tested (at rest and with activity) when you first get an OCD to make sure you are breathing enough oxygen, and ensure you find the best portable oxygen concentrator for you.

Let's explore the world of supplementary oxygen and put your mind at rest.

## Why Do We Need Supplementary Oxygen?

COPD is a chronic airway obstruction that is characterized by damage to your lungs or airways and sometimes

---

both. The damage is non-reversible and progressive.

The damage to the air sacs (alveoli) in our lungs makes it difficult to transfer oxygen and carbon dioxide between our lungs and bloodstream. When this occurs the levels of oxygen in our bloodstream is reduced, often to dangerous levels below 90 percent.

Healthy lungs maintain an oxygen saturation level above 96 percent. When our oxygen levels drop below 90 percent you can start to experience an increased shortness of breath and hypoxia.

Hypoxia is when your organs and tissues are not receiving enough oxygen. Prolonged hypoxia can cause serious and permanent damage to your organs.

Hypoxia can sometimes only affect patients when they're at altitude, such as when they're traveling by air. An altitude test can determine whether you will need supplementary oxygen when flying.

COPD patients who have ongoing problems with hypoxia are often prescribed supplementary oxygen to keep their oxygen saturations in a safe zone — between 92 and 100 percent. Your doctor will determine the amount of oxygen you're prescribed after conducting oximetry or an arterial blood gas study.

Some patients will require supplementary oxygen for normal day-to-day activities, while others may only require it when they're at altitude. Exercise can also affect a patient's oxygen levels. Fortunately, there are ways to deliver oxygen even when you are mobile.

### **How Does Supplementary Oxygen Work?**

Supplementary oxygen is delivered to a patient via the use of different types of oxygen equipment. The two most common delivery systems used are oxygen concentrators and medical oxygen cylinders.

Oxygen concentrators deliver oxygen to the patients via an electrical medical device that extracts air from the room air and then delivers it to the patient. A tube with a nasal cannula delivers the oxygen from the concentrator to the patient.

Concentrators have flow controls that can be tailored to the patients need and range in size and capacity.

Medical oxygen cylinders are a popular option with high liter flow users. In this system, the oxygen is stored in liquid form in a home reservoir, which must be filled on a regular basis.

The advantage of this system is they don't require electricity to operate, however one downside is the difficulty of them with transportation. But, there are smaller cylinders available for mobility.

Many patients use concentrators as their main source of oxygen with a medical cylinder as a backup for power outages.

Options for supplementary oxygen varies between jurisdictions and your healthcare professional will be able to assist you in obtaining the correct equipment for your needs.

### **How Many Liters of Oxygen Is Necessary?**

People often think that there is a one-size-fits-all approach to oxygen therapy. However, it is kind of like asking someone, "What will the weather be like in three weeks?"

The answer? It varies from person-to-person – and it can even vary day-to-day!

Oxygen therapy is administered as "liters per minute" or "lpm" – this is how the dial on your oxygen tank will be labeled.

---

---

When you are initially prescribed oxygen, your physician will have to write a prescription and it will be comprised of the following:

- The type of oxygen system that you are prescribed.
- How many hours per day you should be utilizing oxygen.
- If you need oxygen at rest, exercise, and/or sleep, and how many liters per minute is required for each activity.

For example, you may need 2L of oxygen while you are going about your daily activities, but you may need 4L of oxygen while you are sleeping.

*Next page: Side effects of oxygen therapy, and coping with COPD and oxygen therapy.*

## **Side Effects of Oxygen Therapy**

Side effects of oxygen therapy are minimal. However, as with any medical therapy, there are *some* type of side effects.

These side effects include:

- Bloody nose if the oxygen is not humidified.
- Morning headaches.
- Fatigue.

Oxygen is also highly flammable – although it is not a “medical” side effect, it can pose a fire hazard if it is near an open flame or if near cigarettes.

## **How Will Supplementary Oxygen Affect Me?**

The truth is if you've been prescribed oxygen it is because your body needs it and your disease is serious. The good news is that if you're prescribed supplementary oxygen it's not the end!

In fact, many patients experience a new lease of life with the increased oxygen supply. Like many big changes in life, a positive mindset will always give you a better outcome.

With this in mind, it's important to have the device that will best suit your lifestyle and future plans. Whether you are planning to travel or you lead an active lifestyle and would like to continue to exercise, there is a device for you.

Personally, I have to use an oxygen concentrator when I fly or am at altitude as my oxygen levels drop dramatically. While there are times during exacerbations that my oxygen levels drop, I can generally manage my levels by resting.

Some portable oxygen concentrators allow a lot of mobility. Walking, running and cycling are all possible while using a portable oxygen concentrator in many cases. Recently I saw a video of a fellow patient snorkeling while using a portable oxygen concentrator — talk about embracing life!

In April 2017, I will be running the London marathon and it will be my forth overseas trip since I was diagnosed with COPD. I love to travel and compete in races, and the new portable oxygen concentrators on the market today give me the flexibility to lead my life the way I choose.

While I have written about the challenges of traveling with COPD in the past, it is well worth the hassle.

---

## **What Will People Say?**

Before I was diagnosed with COPD, I used to see patients on oxygen and immediately felt sympathy for them. I was sympathetic because I thought they must be very sick and not have long to live.

Fast-forward to now and I encourage people to ask me about why I'm on oxygen and about the disease I have. Through my journey, I have come to realize that just because a patient is on oxygen, it doesn't mean they're approaching the end. It means they need a boost to accomplish their daily tasks, whatever they may be.

It's far better to confront what life has in store for you and to educate the people around you. By doing this, we can somewhat normalize patients who require an oxygen concentrator to go about their life. The people I come across are interested in my devices and the disease I have.

I have friends all over the world who haven't let oxygen devices get in the way of their goals. There are a number of patients using medical cylinders or portable oxygen concentrators to complete half marathons and marathons.

Don't let the news of having to use supplementary oxygen pull you down — embrace it and use these devices to their full potential. You will still be able to do many of the things you used to do, it will just take an adjustment period. Remember — never let your disease define you!

## **Coping With COPD and Oxygen Therapy**

Although oxygen therapy is an effective strategy to reduce symptoms and improve health, many people with COPD feel embarrassed or ashamed by their need for this treatment. These feelings can lead to depression, anxiety and isolation. The oxygen will improve your quantity of life, but it is your assignment to improve your quality of life. Here's how:

### **Acknowledge and Accept**

Denial and avoidance are the enemy of happiness. Of course you don't like the idea of oxygen therapy — you would prefer to not require this level of treatment. But you do.

Voice your frustrations to those around you rather than suppressing the feelings. Experiencing sadness and anger is natural after any loss, and having to use oxygen equates to a loss of independence and mobility.

### **Change Your Own Perceptions**

Do not see life as black and white or good and bad. It is true you lose some freedom with oxygen, but the loss is not total.

You remain able to go places and do things that you enjoy. Many people report having increased energy and motivation after beginning oxygen therapy because their bodies are performing at higher levels.

Perceptions are powerful because focusing on the negatives will make them large, while focusing on the positives will emphasize those aspects instead. Work to control your perceptions.

### **Change Others' Perceptions**

When you are out in the community, people may look at you oddly or be surprised to see your tank. This uncomfortable experience leads some to turn inwards and can spark feelings of shame.

Instead of retreating into yourself, try taking an active and assertive approach. If you notice someone reacting to you, approach them in a calm way.

Chances are that their reactions stem from curiosity as opposed to any type of harsh judgment. Provide them with

---

information regarding your COPD and the oxygen tank.

Educating others is a fantastic way to advocate for yourself. As you work to change the perceptions of others, your own views will become more positive and stable.

### **Be Adventurous**

Anxiety is commonly associated with COPD, and tells you that certain situations or activities are too risky and should be avoided. Unless you push back against anxiety, your world becomes smaller.

Check with your doctor, and if activity is not flagged, go for it. There will be some setbacks along the way but the benefits outweigh the risks.

### **Be Safe With COPD Oxygen Therapy**

Oxygen therapy does have a set of cautions surrounding it, most notably the danger of oxygen around open flames. Keep away from candles, campfires and cigarettes to maintain your safety.

Being prescribed oxygen therapy can feel like a loss. Take a period of time to grieve and then move forward. Finding ways to stay active while reducing negative feelings will make great improvements to your quality of life. Your tank will feel more like a sidekick than an anchor.