How to Safely Handle Portable Oxygen

by ANGELA FINLAY

Tips for Using Oxygen in the Home, Car and Other Spaces

Any medication can be risky if it's not used properly, including supplemental oxygen. While it's an important tool for better breathing, portable oxygen can also mingle with your surroundings, and it's important to consider how those interactions could endanger you and your family. Fortunately, as long as you take good precautions, you can sidestep a lot of the danger in everyday situations.

The Risks of Portable Oxygen

Although oxygen itself is not flammable, it does make other things more flammable. An excess of oxygen can hang in the air and seep into the material, and if a flame or spark is introduced, the fire will spread much more quickly than it would under normal circumstances. Unfortunately, many deadly house fires have been traced to a small ember in a room with an oxygen canister.

Traveling with COPD in a car or RV may pose some problems, too. Heat sources and hot spots can increase the risk of ignition, and poor ventilation allows the gasses that are given off from the oxygen container to build up in the small space. Since liquid oxygen presents risks for air travel, you'll need to rely on portable oxygen options provided by the airline on any flight you take.

How to Stay Safe and Mobile With Oxygen

Portable oxygen can pose some threat, but giving it up is probably not an option. Luckily, some simple precautions will reduce the inherent risk of injury and damage when you rely on oxygen canisters:

- **Check smoke alarms often.** Faulty smoke alarms are responsible for many fatalities in house fires, so be sure yours are working well. Test them every few months, and don't ignore the "low battery" warning beeps. You should have one working smoke alarm on each floor of your home.
- **Do not wear flammable clothing.** Since oxygen can seep into the material and reduce its flame resistance, non-flammable clothing will hold up better than other fabrics if a spark happens to land on you. Certain polyester fabrics and cotton treated with fire retardant are good choices. If you prefer natural fibers, wool and silk are more difficult to ignite and will burn more slowly, which will give you time to put out any flame.
- **Obey a "five-foot rule."** Keeping a good distance from any open flame is the easiest way to avoid a catastrophe. This applies to oxygen storage, too: keep your liquid and compressed oxygen containers safely stored at least five feet from any source of spark or flame.
- **Be cautious of any heat source.** Keep an eye out for dangers in disguise — gas stoves, barbecues and even birthday candles will draw you close to a heat source, and you could be fueling the fire before you know it. Give candles a pass, stick to an electric stove or fireplace and let someone else do the grilling at your next backyard party.
- **Avoid cigarette smoke at all costs.** Where there's smoke, there's fire. Small, hot ash could go

unnoticed and smolder for a while before flaming up, and that’s not a risk worth taking when there’s oxygen around (or anytime). Even if you have given up smoking, you need to be wary of other smokers around you.

Although you must be cautious, don’t let your portable oxygen restrict your interests and mobility. Instead of worrying about what could happen, get into the habit of taking these precautions. Once they become second nature, you can focus all your thoughts and energy on the activities that you enjoy.

What Kind of Oxygen Can I Use?

Oxygen is stored in pressurized tanks or produced by a machine called an oxygen concentrator. Tanks can come in various sizes to accommodate travel. Stored oxygen can come in both liquid and gas forms. Liquid oxygen is the more convenient of the two because it takes up less space and is easily transferable to smaller travel tanks. It is important to note that liquid oxygen will slowly run out even when not in use, so it is not recommended that liquid oxygen be stored long-term for later use.

Another option is an oxygen concentrator. This machine utilizes the oxygen from ambient air to produce concentrated oxygen for your medical needs. Since the concentrator never has to be refilled, it will never run out. The disadvantage of a concentrator is that it requires electricity to work. If the power ever goes out, a backup tank of oxygen or a battery-operated portable concentrator should be available.

How Do I Use the Oxygen?

To inhale oxygen from a tank you need equipment that connects the tank to your respiratory system. One of these items is a nasal cannula. A nasal cannula is plastic tubing attached to the tank's nozzle. The tubing wraps over the ears like earbuds or eyeglasses and feeds into the nose via two prongs. Since the cannula comes in contact with your sinuses, it is important to keep the tubing clean. Wash your tubing weekly with soap and water, rinsing thoroughly. After about a month, the cannula should be replaced entirely.

If you get a cold, replace the cannula as soon as you have recovered to avoid recontamination. Some patients require more oxygen than a nasal cannula can provide. These people need an oxygen mask that fits over the nose and the mouth. Like a cannula, it should be replaced every four weeks and should be replaced if you experience cold-like symptoms. If you have a tracheotomy then a trans-tracheal catheter may be in order. It is a small tube that is placed into your windpipe via surgical procedure. You will need to clean your catheter according to the instructions provided by your doctor.

How Can I Make Using My Oxygen Tank More Comfortable?

Using oxygen can lead to some minor discomfort such as dryness of the lips, mouth and nose. Whatever you do, using Vaseline or any petroleum-based products is not recommended. Instead, use aloe vera or water-based lubricant to moisten the dry areas. If the area behind your ears gets sore from the weight of your nasal cannula you can pad the tubing with some gauze to ease the discomfort.

What If My Oxygen Is Making Me Feel Worse?

If you experience side effects from oxygen use such as headaches, nervousness, drowsiness or confusion you should contact your healthcare provider. Under no circumstances should you ever stop or modify your flow of oxygen.