



## Welcome to Oxygen Therapy!

### Oxygen Therapy Tips & Information to Make Your Treatment a Success

People with COPD (chronic obstructive pulmonary disease) and other respiratory conditions often receive a prescription for oxygen therapy (also called supplemental oxygen). That's because COPD is a chronic lung disease that damages the lungs which reduces the amount of oxygen delivered to your body.

Oxygen is considered a drug, so a doctor will give you a prescription.

The prescription will also include your appropriate oxygen flow rate, which is the amount of oxygen that is delivered each minute by the device you are using.

### There Are 3 Types of Oxygen Therapy

**1. Compressed oxygen:** Oxygen in a gas form is stored under pressure in a metal tank. The regulator on the tank controls the oxygen flow rate. It also shows how much oxygen is left in the tank; some tanks are refillable by the user while others need to be refilled or replaced by your oxygen supplier. Tanks are available in various sizes. Your doctor will recommend the most appropriate size for you. You should also have extra oxygen tanks available.

**2. Liquid oxygen:** Oxygen is usually a gas. But it turns to liquid when frozen. Liquid oxygen is often prescribed for people who need high levels of oxygen. When the liquid oxygen is released, it turns into gas that you breathe in. You can store and transport liquid oxygen more easily than compressed oxygen tanks. But because liquid oxygen is very cold, -297° F, it can cause frostbite if not handled carefully.

**3. Oxygen concentrators:** These electric or battery-powered devices pull air from your surroundings. They then separate and remove nitrogen and other gasses and deliver purified oxygen for you to breathe, so you never run out of oxygen. Concentrators for home as well as lightweight portable oxygen concentrators are available.

### What is Needed for Oxygen Therapy

Oxygen is generally delivered by one of these methods:

- Nasal cannula: the most common delivery method. A soft plastic tube with two prongs is inserted into your nostrils
- Facemask: fits snugly over your mouth and nose and may be more appropriate for people who can't tolerate nasal cannulas or need higher oxygen concentration
- Tracheotomy tube: a special tube surgically placed into your windpipe and used for serious cases
- Oxygen can be bled into a PAP or Bi-level device by using an adapter.

Other accessories are available to help make your therapy more comfortable and convenient:



- Carrying cases and carts: oxygen tanks can be carried in cases or rolled on small carts to allow portability
- Humidifier bottles: oxygen therapy can dry out your nose. Humidifier bottles attach to your equipment and add moisture to prevent dryness. Higher oxygen settings can dry the lining of the nose. A humidifier attached to your stationary oxygen equipment can help prevent this dryness
- Reservoir tubing: makes your oxygen last longer or increases the amount delivered

## How to Keep Your Equipment Clean

It's critical that the various components of your oxygen delivery system be cleaned as suggested. These include your compressed oxygen or liquid oxygen tank, oxygen concentrator, nasal cannula, facemask, tubing, and humidifier.

Cleaning helps prevent the buildup of bacteria, mold, dust, and germs, which may cause such conditions as pneumonia or other respiratory infections. And because COPD weakens the immune system, you are even more prone to illness.

Cleaning your equipment and replacing parts when necessary also keeps your oxygen delivery system working properly so you get the therapy you need.

### Cleaning Basics

The cleaning supplies you'll need are simple too:

- Warm, clean water
- Mild soap (although don't use harsh dish detergents, alcohol, bleach, strong-smelling products, scented oils, or antibacterial soaps. Never use anything flammable!)
- Clean, dry towels
- A sink, tub, or basin large enough to hold your hose or tubing

Also, reserve enough space to allow your equipment to dry.

To help ensure your equipment is clean, make sure your home is clean as well. Keep the indoor air free from allergens, dust, and mold.

### Cleaning Your Compressed Oxygen or Oxygen Tank

Use a damp cloth to wipe and dust and dirt from the exterior of the tank. And inspect them often to make sure they are working properly.

To prevent damage and store safely, keep oxygen tanks in a well-ventilated space and an upright position.

Compressed oxygen and liquid oxygen tanks need to be refilled or replaced regularly. Be sure to keep track of your oxygen use so your tanks can be replaced or refilled on time.

### Cleaning Your Oxygen Concentrator



Oxygen concentrators should be cleaned every week. First, unplug the oxygen concentrator. Then use a damp, slightly soapy cloth to wipe off any dirt or grime from the exterior of the unit. Dry with a towel. Never submerge your oxygen concentrator in water.

It is also important to clean your oxygen concentrator's filters every week. Wash them in warm, soapy water, pat them dry with a clean towel, then place them in a clean spot with lots of circulation to finish drying. Allow the filter to dry completely before placing back in the concentrator.

Keep an extra set of filters handy in case one gets torn. And replace filters as suggested by the manufacturer.

### Cleaning Your Nasal Cannula and Face Mask

Nasal cannulas and facemasks should be washed at least once a week. Wash in warm, soapy water then rinse well with hot water, and hang to dry.

If you notice any mucus buildup, clean more often.

You should also replace your cannula or mask every 2-4 weeks—and change them every time you get sick.

### Cleaning Your Extension Tubing

Extension tubing should be replaced every 2 months. But inspect it often; if you see any tears or cracks, replace it with new tubing immediately.

**This tubing should not be washed or submerged in water**, which can cause mold to form inside it. Instead, wipe the outside of the tubing.

### Tips For Safely Storing Oxygen Tanks

Although oxygen is a safe, non-flammable gas, it does support combustion. So some materials may be more likely to catch fire in the presence of oxygen.

**Be sure the room where you store the oxygen is well-ventilated:** Never store cylinders in poorly ventilated, cramped spaces, such as a closet, cabinet, or underneath the bed. Oxygen can accumulate, which poses safety hazards.

**Store oxygen cylinders in an upright position:** Oxygen tanks should always be stored upright and firmly secured, such as in an oxygen storage cart or stand. This will prevent the cylinders from falling over, which may damage them and cause oxygen leaks. (Tanks should also be firmly secured when you are using them.) If you cannot store the cylinders secured and upright, they should be stored lying down where they cannot roll into the other.

If you are using liquid oxygen, don't lay the tank on its side since the oxygen can evaporate.

Do not store oxygen tanks under your bed or in the trunk of your car.



**Store oxygen tanks at least 10 feet from any heat source:** This includes lighted fireplaces, candles, gas and wood-burning stoves, electric and gas heaters, furnaces, radiators, space heaters, and steam pipes.

**Store oxygen tanks near an exit:** They'll be easier to get in and out of the house, especially during an emergency. But never block an exit – with an oxygen tank or anything else.

## Tips for Safely Using Oxygen

### Be Careful in the Kitchen

The fact is, cooking and oxygen tanks don't mix.

Keep oxygen tanks away from the oven, stove, and any splattering grease. And don't operate a toaster and toaster oven near oxygen.

### Steer Clear of Products Containing Petroleum

Products containing petroleum, grease, or oil can interact with oxygen and may cause burns.

These items include vapor rubs, petroleum jelly, body oil, shaving lotion, skin creams, sunscreen, and even lipstick. Always check the label. Try to use water-based products instead.

### Post Warning Signs Throughout Your Home

It's important to let visitors know that oxygen therapy is being used in your home. So post signs that say "No Smoking," "No Open Flames," and "Oxygen In Use" inside and outside your house.

Needless to say, smoking—by you or anyone else—is never allowed in areas where oxygen is in use.

Warning signs also alert emergency personnel, such as the fire department and EMS, that there is oxygen in the home. Knowing this will help them plan the safest route to extinguish a fire or supply you with emergency oxygen if needed.

### Don't Use Oxygen Near Electrical Appliances

Oxygen and electricity don't mix. Never use oxygen near the following:

- Hair dryers or curling irons
- Electric blankets or heating pads
- Toys with electric motors
- Electric razors and electric toothbrushes

### Always Be Prepared

Make sure your home's smoke detectors are working properly. Keep a fire extinguisher handy—and have everyone in your home learn how to use it.



To ensure you have the oxygen you need when you need it, keep back-up tanks available. You may also want to consider purchasing a generator in case of power outages.

Keep your doctor's contact information as well as the company that supplies your supplemental oxygen close by.

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