

Why Do I Need to Use Oxygen?

Your physician has ordered oxygen therapy to help you breathe better, decrease the work of your heart, and generally improve your quality of life.

When your body does not get enough oxygen you may experience difficulty breathing, fatigue, loss of memory, and/or confusion. The oxygen therapy will help provide relief from these symptoms.

Oxygen therapy is safe and effective if you follow your physician's orders. Failure to follow your physician's orders may result in you feeling worse and possible admission to a hospital.

Oxygen is a drug. Too much or too little oxygen may be harmful to you. You must follow the prescribed oxygen flow ordered by your physician. Your physician will determine if the oxygen flow needs to be adjusted.

If your physician prescribes a change in oxygen liter flow, please contact Discount Drug Mart Professional Medical Equipment and Services so we can keep our records current.

How Does an Oxygen Concentrator Work?

Basically, an oxygen concentrator is an electrical device that uses the air in your room to concentrate oxygen gas. The room air (which is made up of 21% oxygen, 79% nitrogen and other gases) is drawn into the concentrator and the nitrogen is filtered out, thus providing you with near 100% oxygen leaving the flow meter on the concentrator.

The oxygen concentrator is made to supply you with oxygen 24 hours a day, 7 days a week without a need to replace empty cylinders. The only requirement is to have a properly grounded electrical outlet that is not on the same circuit of other major household appliances.

How to Operate the Oxygen Concentrator

1. Place the oxygen concentrator in a central location in the house.
 - a. Minimum 6 inches away from the wall/curtains to allow adequate airflow
 - b. DO NOT locate near any heat source.
2. Plug the oxygen concentrator into a 110-volt outlet.
 - a. The outlet should be properly grounded. This is the customer's responsibility.
 - b. The outlet used should not have any other major appliance on the same circuit (air conditioner, refrigerator, etc.).
 - d. DO NOT use extension cords with the concentrator.
3. Turn the oxygen concentrator **ON**, using the ON / OFF switch located on the concentrator front panel.
 - a. The power failure alarm will sound for approximately 10 seconds after the concentrator is first turned on.

<p>4. YOUR PHYSICIAN ORDERED YOU TO USE THE OXYGEN AT THE FOLLOWING LITER FLOW(S).</p> <p>_____ Continuous, 24 hours per day _____ During Exertion</p> <p>_____ When needed during the day _____ When sleeping</p>

5. Connect your oxygen tubing to the green or black adapter coming out of the front of the oxygen concentrator.
 - a. The maximum length of tubing you can use is 50 feet.
 - b. If you have a humidifier, thread the humidifier to the oxygen outlet on the concentrator, then attach the extension tubing to the outlet (nipple) on the humidifier.
6. If using an extension tube, insert a plastic tubing connector between the extension tube and the nasal cannula.
7. Place the nasal cannula into your nose, curved nasal prongs down, place the tubing over and around the back of your ears. Adjust the slide on the tubing under your chin for a comfortable fit.
 - a. Do not use any petroleum products in or around your nose (i.e. Vaseline).

CLEANING & MAINTENANCE

The customer has the responsibility to help maintain the oxygen equipment while it is in their home.

Patient / Customer Responsibilities

Gross Particle Intake filter:

Once a week, clean the intake filter by rinsing the filter under water and pat dry between 2 towels.

Concentrator:

Wipe with a clean damp cloth once a week. Do not use any products that have a petroleum base.

Nasal Cannula:

Check the nasal cannula prior to each use. When it becomes hard and /or discolored, (this will depend upon the usage of oxygen and /or the environment of the home), replace the nasal cannula with your back-up cannula. You should always have an extra nasal cannula available. If not, please contact Discount Drug Mart Professional Medical Equipment and Services to have it delivered. If you are using the oxygen on a continuous basis, the nasal cannula should be changed a minimum of once a month.

Extension tubing:

Replace as needed, once or twice per year depending on the home environment.

Humidifier:

If you are using a humidifier, the humidifier must be cleaned every 3 days by washing all parts in clean soapy water, rinsing well, followed by soaking in 1 part white vinegar and 3 parts water for 20 minutes

and rinse well. Fill with distilled water.

CONCENTRATOR TROUBLE SHOOTING

1. Power Failure Alarm:

The power failure alarm will sound when there is an interruption of electricity. Some models have a continuous alarm. Other models of oxygen concentrators may have a different alarm. Observe the alarm during your instruction.

What to do if the power failure alarm sounds:

1. Turn the oxygen concentrator OFF.
2. If you use oxygen continuously, switch to your back-up oxygen cylinder.
3. Check to see if the electricity in the house was interrupted. Do you have lights? If you do not have electricity, contact your electric company. If you have electricity, proceed to #4.
4. Check the plug connection in the electrical outlet:
 - a. Is the concentrator plugged in?
 - i. If yes, continue to #4b, if no, plug in the concentrator and turn it on.
 - b. Check for power at the outlet. Unplug the concentrator and plug a lamp or a clock into the exact outlet that the concentrator was plugged into. Does the clock or lamp work?
 - i. If yes, continue to #5, if no, plug the concentrator into another working outlet.
5. Check the circuit breaker on the oxygen concentrator. If the circuit breaker is popped out, push the circuit breaker in and turn the concentrator on.

If the circuit breaker is not popped out and there is power at the outlet and the unit continues to alarm, contact Discount Drug Mart Professional Medical Equipment and Services.

2. No Oxygen Flow:

It is common at times not to feel the flow of oxygen entering the nose.

To verify there is oxygen flow:

1. Place the nasal cannula (nosepiece) in a clean glass of tap water. The water should bubble.
 - a. If the water does not bubble do the following:
 - i. Make sure the concentrator is turned on and not alarming.
 - ii. Make sure the FLOW CONTROL is adjusted to the correct liter flow.
 - b. If you turn the FLOW CONTROL clockwise and the ball remains at zero, do the following:
 - i. Disconnect the EXTENSION TUBING from the concentrator oxygen outlet and try to readjust the oxygen FLOW CONTROL.
 - c. If you can adjust the flow to the prescribed liter flow without the tubing connected, the tubing must be blocked or have kinks.
 - i. Remove the blockage or kinks from the tubing (check under furniture legs, between door hinges etc.) and recheck for flow. If no flow, proceed to the next section.
 - d. If you can adjust the flow to the prescribed liter flow with the oxygen tubing connected and no bubbling occurs from the cannula check for leaks.
 - i. Look for places where oxygen can leak. (Humidifier, oxygen outlet adapter, green nipple adapter, tubing connector, or a cut in the tubing). Replace or reattach the part at the leak.

Call Discount Drug Mart Professional Medical Equipment and Services if you are unable to locate the leak or verify bubbling when you place the nasal cannula in a glass of water.

Oxygen Safety

NO OPEN FLAMES - NO SMOKING!

Oxygen rapidly accelerates combustion. it makes items burn *faster* and *hotter*. Items that have difficulty burning under normal conditions will burn more rapidly in an oxygen-enriched environment.

Stay at least 10 feet away from any open flame (candles, lighters, and cigarette ash), sparks, hot oil, or grease. Do not use oil, grease, or any petroleum product on any oxygen connection.

Keep oxygen Tubing and Concentrator 10 ft. away from Kerosene or Electric Space Heaters and Heating Plates.

Do not use an extension cord. Plug the oxygen concentrator directly into a 110 volt grounded outlet. Standard household extension cords will overheat and increase the risk of fire. Never overload a circuit.

Do not place the oxygen concentrator in a confined or closed area (i.e. closet, bathroom). Try to place the oxygen concentrator in an open central location in the home, away from any heat source (register). The concentrator generates heat and overheats if placed in closed area

The maximum length of oxygen tubing is 50 feet. Always pay attention to the tubing so you or a caregiver will not trip over it. Observe the tubing, making sure it is not under throw rugs, next to sharp objects, space heaters, fireplace, etc.

Always store cylinders secured in a stand, cart, crate or lying on the floor. Cylinders can fall and cause injury to a person and damage to the oxygen regulating device. Cylinders must be lying down.

Do not use an oxygen mask with an oxygen concentrator, Carbon dioxide may not be removed from the mask and can be harmful to you.

Install and check operation of Smoke Detectors.
NATURAL DISASTER – EMERGENCY RESPONSE

In the event of a natural disaster in our community (power outage, weather damage, etc.) We ask that you call our main number to contact us. If we are directly affected by the disaster and unable to respond, we ask that you contact a local oxygen supplier to provide service. We ask that you use your oxygen equipment provided by Discount Drug Mart Professional Medical Equipment and Services. If you are relocated to an area with power, we ask that you take your oxygen concentrator and portable cylinders with you. Please attempt to contact us if you are in a new location, so that we may be able to provide service to you. We will make every attempt to maintain contact and service through a disaster. Discount Drug Mart Professional Medical Equipment and Services' leadership is committed to doing everything we can to ensure your oxygen needs will be met. If a medical emergency exists, please contact your emergency response system through 911, or at a number your local community's fire and/or police department recommends.

Using the Emergency/Portable Oxygen Cylinders

The Emergency cylinder is used in the event that there is a power failure or the oxygen concentrator malfunctions. The Emergency cylinders should not be used for any other purpose.

We will provide 1 or more Emergency Cylinders for back-up use. If you must use the Emergency Cylinder, be sure to call Discount Drug Mart Professional Medical Equipment and Services when the pressure gauge is less than 1500 psi, so we can replace the cylinder. In many cases the same regulator and cart may be used for a portable cylinder as well as the Emergency Cylinder. Your Discount Drug Mart Professional Medical Equipment and Services representative will further explain this to you.

There are a variety of cylinder sizes. We can determine the correct size based on your prescribed Liter Flow, the Duration of Use, and your ability to Ambulate. Refer to the Tank Duration Chart for consumption.

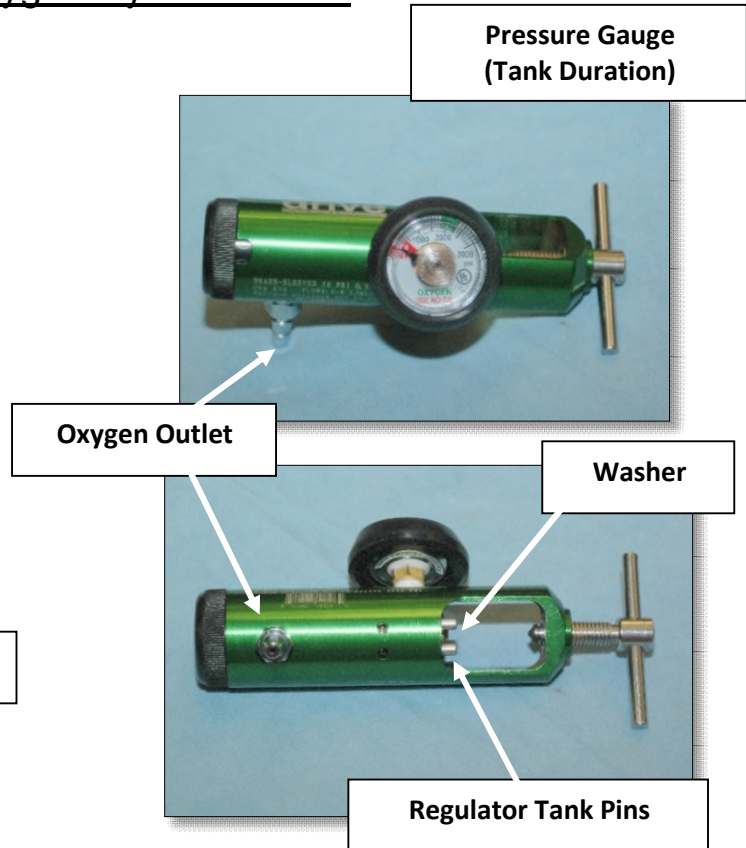
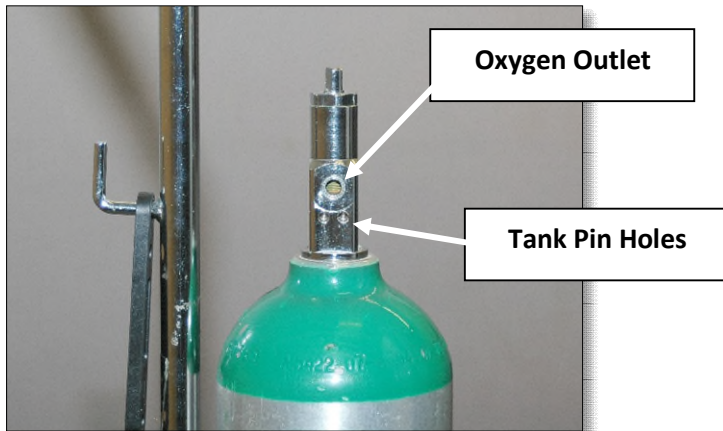
Oxygen Cylinder Safety

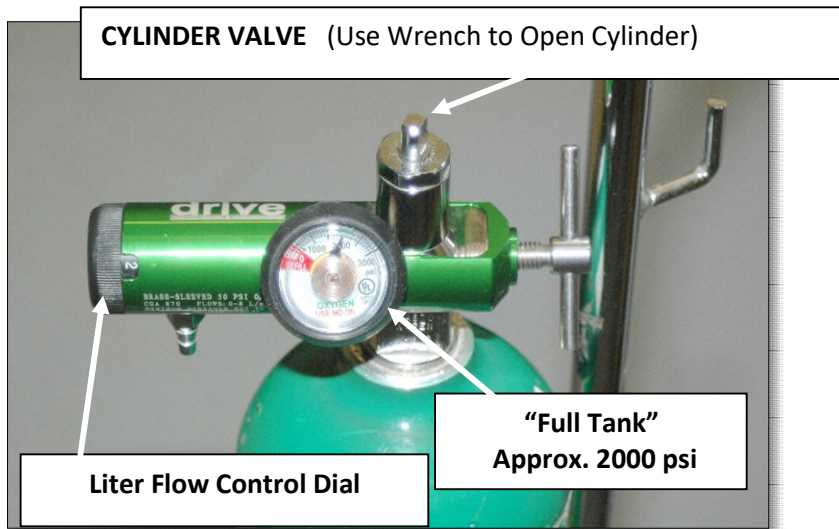
- No Smoking of open flames
- Always have the cylinders secured in a stand or cart, or laying on the floor.
- (Cylinders are under pressure and could cause harm to people and damage to structures if they fall)***
- No use of Vaseline or other petroleum based products on your face



Oxygen Regulators & Oxygen Cylinder Valve

- When transporting in a vehicle: Secure cylinders so they are not rolling around.
- Make sure there is adequate ventilation by leaving a window slightly open.
- DO NOT leave in an extremely hot vehicle.
- No use of oil or grease with oxygen or on the regulator or cart.





Adjust the Liter Flow Control Dial to the Prescribed Liter Flow:

_____ LPM

A Full _____ Cylinder should last approximately _____ Hours.

Connect Nasal Cannula to the Oxygen Outlet Nipple

*The regulator has 2 short pins and 1 large hole (Oxygen Inlet), where the washer is attached.

The cylinder has 2 small pin holes, and 1 large hole (oxygen outlet).

*Place Regulator on cylinder to line up the pins in the holes, and tighten "T" handle so that washer is firmly pressed on to oxygen Outlet.

*Use cylinder wrench to open the cylinder by turning it counterclockwise.

*The needle on the pressure gauge should indicate the amount of oxygen in the cylinder

Turning on the Cylinder:

To open the cylinder, turn the Wrench (or Toggle Valve) on the top of the cylinder Counterclockwise ½ turn. Notice the pressure gauge on the regulator will rise to reveal the amount of oxygen in the cylinder, and a full tank should be approximately 2000 psi. As you use the oxygen in the cylinder, the pressure needle on the gauge will slowly fall, to reveal the amount of oxygen still remaining.

There should be no Leaking or Hissing Sound coming from the regulator/tank connection. If there is a leaking/hissing noise being heard when opened, turn the cylinder off with the wrench and review the following items:

- Is the regulator on tight?
- Is the Washer in place on the regulator to seal the outlet?

After reviewing and tightening, try to open cylinder again and check for leaks or hissing. If problem continues, contact Hastings.

Turning off the Cylinder:

Always Turn Off the cylinder when not in use (not just the liter flow), by turning wrench Clockwise, and then drain the oxygen that is trapped in the Regulator so the needle drops back down again.

When to Replace your Emergency/Portable Cylinder:

When the pressure gauge on the Regulator reads 500 psi or less, it is almost time to replace the oxygen cylinder. To get the most out of your cylinder you can change the cylinder when it is completely empty. Keep the cylinder valve closed on the top off the cylinder, and remove the Regulator by turning the T-Handle counterclockwise until loose enough to remove the regulator (Do Not completely remove the T-Handle from regulator. Make sure that the Washer is still attached to the regulator (may stick to tank). Replace washer if it appears damaged. Remove the white tape from the new cylinder and position regulator by lining up pins and retightening Regulator.

Oxygen Cylinder Size and Duration Chart

"E" Aluminum, CYLINDER PRESSURE

Liters per Min.	500 psi	1000 psi	1500 psi	2000 psi
1 lpm	2h 30 m	5 h	8 h	10 h
2 lpm	1h 15 m	2 h 30 m	4 h	5 h
3 lpm	45 m	1 h 30 m	2 h 30 m	3 h
4 lpm	30 m	1 h 15 m	2 h	2 h 30 m
5 lpm	35 m	1 h	1 h 30 m	2 h
6 lpm	15 m	45 m	1 h 15 m	1 h 30 m
	Approximate length of Time (hours/minutes)			
	wt.10.75 lbs.	/reg. 11.5 #	ag/cart 16.5	682 L 4 cu. Ft. lt. 29 in.

"D" Aluminum, CYLINDER PRESSURE

Liters per Min.	500 psi	1000 psi	1500 psi	2000 psi
1 lpm	1h 30 m	3 h	5 h	6 h
2 lpm	45 m	1 h 30 m	2 h 30 m	3h
3 lpm	30 m	1 h	1 h 30 m	2 h
4 lpm	20 m	45 m	1 h	1 h 30 m
5 lpm	15 m	30 m	45 m	1 h
6 lpm	10 m	20 m	30 m	45 m
Approximate length of Time (hours/minutes)				
	wt 7.25 lbs.	w/reg. 8.0 lbs.	415 L	15 cu. Ft. Ht. 19 in.

"C" Aluminum, CYLINDER PRESSURE

	Liters per Min.	500 psi	1000 psi	1500 psi	2000 psi
1 lpm	1h	2 h	3 h	4 h	
2 lpm	30 m	1 h	1 h 30 m	2h	
3 lpm	20 m	35 m	50 m	1 h 15 m	
4 lpm	15 m	30 m	45 m	1 h	
5 lpm	10 m	15 m	30 m	45 m	
6 lpm	5 m	10 m	20 m	30 m	
Approximate length of Time (hours/minutes)					
	wt. 5.25 lbs.	w/reg. 6.0 lbs.	248 L	9 cu. Ft.	Ht. 14 in.