

**Island Home Medical**  
**508-693-4380**  
**OXYGEN CONCENTRATOR, OXYGEN CYLINDER**  
**Patient Guidelines**

**YOUR PRESCRIPTION**

Oxygen is a drug and has been prescribed by your physician. An exact flow rate in liters per minute has been ordered to increase the oxygen level of your blood. This flow rate must never vary from what your doctor prescribes. Your doctor may have prescribed your oxygen for 24-hour use, use only during sleep, use only during exercise, or use only during acute episodes of shortness of breath. Always use your oxygen according to your prescription.

**ABOUT OXYGEN**

The more you comply with your prescription, the more benefits from it you will obtain.

Oxygen is not flammable, nor does it explode. However, oxygen will make a fire burn quicker. To avoid the chances of a fire:

- Never smoke while using your oxygen concentrator.
- Do not use open fire or flames near the oxygen concentrator.
- Keep all electrical equipment (electric razors, heaters, blankets) at least 5 feet from your oxygen).
- Keep away from sources of heat (stove, space heater, radiator, fireplace). Do not store on or near a heater, or any enclosed space.
- **Never use grease or oil on oxygen equipment.** Keep equipment away from all flammable materials such as oil, grease, aerosols, paints, gasoline and solvents. Do not use petroleum jelly with oxygen. Use water-based lubricants to moisten your lips or nostrils, if necessary.
- Never store any cylinder in closet or unventilated space. **Do not place your oxygen equipment in a small or unventilated storage area.** Any venting oxygen could create a fire hazard. Large, unventilated storage areas can be dangerous as well.
- Oxygen cylinder should never be stored or transported in the trunk of a car.
- Tanks should be secured in a carrier and by a seat belt when in transit.
- Never use oil-based face or hair creams, aerosol sprays, a hair dryer or an electric razor. It is possible in certain conditions that the combination of oxygen, oil-based toiletries and a spark from an electrical appliance, such as an electric blanket, hair dryer, electric razor or heating pad, could ignite and cause burns. Always use water-based cosmetics or creams.
- Secure cylinder at all times in a base or cart. **Oxygen cylinders need to be secured in a special base to keep the cylinder from falling over. The weight of the cylinder can damage property and people if it were to fall on something or someone. The cylinder valve could also be knocked off if the cylinder were to fall over. The high pressure coming out of the valve opening could then cause the cylinder to move about the room in a destructive, uncontrolled manner.**



**NO SMOKING** Do not permit smoking in the same room as your oxygen equipment. Place “No Smoking” signs on the front and back door of your residence and also at the entryway to the room where you will be using your oxygen.

It is possible for you to be in a large room where smoking is permitted as long as lighted smoking materials are not within five feet.

**USING SUPPLEMENTAL OXYGEN**

The 21 percent concentration of oxygen in the air around us is enough for people with normally functioning lungs and hearts. However, a person with lung or heart problems

may often benefit from breathing air that has a higher concentration of oxygen in it.

When the body does not get enough oxygen, a person may experience difficulty in breathing, fatigue, loss of memory, headaches and/or confusion. Using supplemental oxygen may help provide relief from these symptoms.

## COOKING SAFEGUARDS

**It is best to use a microwave oven or make other arrangements, but if you must cook, you may:**

**Step 1:** Secure the cannula over your ears and behind your head instead of under your chin.

**Step 2:** Secure the oxygen tubing to the side of your clothing at your waist with a large safety pin. This method will keep the oxygen tubing away from the source of heat. Do **not** bend down close to the burner.

## HAND WASHING TECHNIQUE

Hands must be clean prior to handling supplies and solutions. Wash hands before beginning any procedure.

**Step 1:** Wet hands thoroughly with warm water. **Step 2:** Use antibacterial soap. **Step 3:** Wash hands for 1-2 minutes using a rotary motion and friction. Wash: Back of palm of each hand Between all fingers **Step 4:** Rinse hands under running water. **Step 5:** Dry on a clean cloth or paper towel.

## THE OXYGEN CONCENTRATOR

The Oxygen Concentrator is an electrically operated device which takes room air and separates the oxygen from the other gases and delivers more “concentrated” oxygen to you.

1. Plug the concentrator’s electrical cord into an outlet.
  - Keep back and sides of the concentrator at least 6 inches from drapes or walls.
  - Locate concentrator at least 3" from wall.
  - Use an outlet which is not controlled by a wall switch
2. Attach up to a maximum 50 feet of tubing to the silver oxygen outlet on the front of the machine.
3. Turn the concentrator switch to “ON”. It is normal for the unit to sound an alarm for a few seconds as an electronic test. Alarm will silence, and green Oxygen light remains on.
4. Adjust the oxygen flow by turning the liter control knob until the flow rate is set according to your doctor’s order.
5. Next, fit the nasal cannula on your face, making sure the prongs face upward and curve INTO your nostrils.

## CONCENTRATOR ROUTINE MAINTENANCE

The rear intake should be cleaned twice weekly: remove rear intake cover, vacuum the intake opening grill and inside of cover.

The nasal cannula should be replaced at least once a month.

The extension tubing should be no longer than 50 feet and replaced every 12 weeks.

## CONCENTRATOR TROUBLESHOOTING

Your concentrator has alarms which will tell you if the machine is not functioning properly. If you hear or see one of the alarms call Respiratory Home Services immediately.

If there is a power outage or machine malfunction turn the circuit breaker reset is necessary. Check that tubing is securely attached to the oxygen outlet and is not crimped, pinched, or obstructed by heavy furniture, chairs, etc.

## THE OXYGEN CYLINDER SYSTEM (for back-up &/or portability).

With this system, oxygen gas is pressurized to a high level and stored in steel or aluminum cylinders. The pressure is measured in pounds per square inch (PSI). A full cylinder may have between 1800-2200 psi when first turned on. This pressure gauge will show pressure gradually dropping as the oxygen is used.

Three different sizes of smaller cylinders are commonly available: the D cylinder, the E cylinder and the M6 cylinder. The M6 and D cylinders are smaller. They are used with a carrying case with a shoulder strap. The E cylinder is a bit larger and is often used with a wheeled cart.

The oxygen is delivered to you through a nasal cannula or face mask. The tubing on the cannula or mask is attached to the outlet on the regulator.

Be sure the cylinder is secured in a pouch, on a cart or stand, away from heat, open flames, smoking or combustible materials. If you have extra portable cylinders, they should be stored out of the way.



## TO ATTACH REGULATOR TO OXYGEN CYLINDER

Remove the seal from the post valve of the full cylinder. Save the washer inside the seal.

- Attach the regulator to the cylinder by slipping the regulator yoke down over the post valve and aligning the 3 pegs inside the yoke with the 3 holes in the post valve.
- Tighten the “T” bolt handle firmly. If the “T” bolt isn’t secure or if the washer is faulty there will be a loud hissing sound when the valve is turned on as the oxygen escapes. **There is no danger.** Turn the cylinder valve off and tighten “T” bolt or replace washer as necessary.

## TO TURN ON OXYGEN



Turn flow adjustment knob OFF.

Using the cylinder wrench directly on top of the tank, slowly turn the valve counter-clockwise (left) all the way. This will open the cylinder valve allowing gas into the regulator and the pressure gauge will now indicate the amount of oxygen in the tank.



Observe the pressure in the tank to ensure oxygen is in the cylinder.

Adjust the flow control knob (flowmeter) until the flow indicator is at the prescribed flow rate.

### **Fit the nasal cannula.**

Insert the two prongs of the cannula into your nostrils. Make sure the prongs curve into your nostrils. Slide the tubing over and behind your ears.

Adjust the tubing to fit comfortably under your chin by sliding the adjuster upward. Be careful not to adjust it too tightly.

## **TO TURN OFF OXYGEN**



When not in use, close the cylinder by turning the wrench clockwise all the way.

The flow of gas will cease when all the oxygen pressure is released from the regulator.

**When both the pressure gauge and the flowmeter register zero, turn the liter control knob counterclockwise until it is snugly closed.**

## **TROUBLESHOOTING OXYGEN TANKS**

- Check that the main valve is open and that pressure is observed on the pressure gauge.
- Check that the flowmeter is ON & adjusted to the prescribed liter flow.
- Check that tubing is securely attached to the oxygen outlet and is not crimped, pinched, or obstructed by heavy furniture, chairs, etc.

Remember: It is your responsibility to monitor the oxygen supply to insure that you do not run out of oxygen. A chart has been provided to assist you in determining when to order more oxygen. **Call our office** to order a new cylinder **1 to 2 days before** you run out **and** when the contents gauge reads 500 psi.

## **REORDERING OXYGEN**

Always be aware of the amount of oxygen remaining in your cylinder. Please call Respiratory Home Services at least 24 hours in advance to order tanks.

***Place orders on Thursday for a Friday delivery so that you have enough tanks for the weekend.***

## **CLEANING AND MAINTENANCE PROCEDURES**

Your oxygen cylinders and regulator are durable, dependable pieces of equipment and will continue to operate efficiently with proper maintenance

As necessary, you should wipe your regulator, cylinder and/or carrying case with a clean, damp cloth. **Never** use wax, cleaning sprays or polish. Many of these products are flammable.

**Never** use any grease, oil or other lubricants on your regulator. These compounds are volatile and could pose a safety hazard. **Never** attempt to repair your regulator yourself. Should you have any problems with your oxygen cylinder system at any time, call Respiratory Home Services immediately.

## **CARE OF YOUR OXYGEN TUBING**

Minimal care is required of your oxygen tubing and nasal cannula. You should discard and replace your nasal cannula every two weeks. Discard and replace your tubing every 90 days. Do not use alcohol or oil-based products on or near your cannula.

## **TRAVEL TIPS**

Contact your doctor at least 4 weeks in advance of departure to make sure your proposed trip is medically safe and **to obtain additional copies of your prescription.**

Contact Respiratory Home Services for assistance with getting oxygen refills along your driving route or at your final destination.

Have cash available to pay for oxygen refills or equipment.

### **If traveling by Car / RV:**

- Remind passengers not to smoke in the car/RV.
- Securely fasten cylinders to prevent movement (usually a seat belt).
- Keep one window partially open to provide fresh air circulation and avoid accumulation of oxygen.
- Do not store oxygen in the trunk of your car.
- Do not store oxygen in an area where the temperature will reach 120 degrees Fahrenheit.
- In a recreational vehicle, do not store near gas or open flame.

### **If traveling by Bus/Train:**

- Contact the reservation office for specific information about the use of oxygen and special accommodations.
- Most companies require at least two weeks notice if you are going to be using oxygen on your trip.

### **If traveling by Airplane:**

**•Most airlines require at least four weeks notice if you are going to be using oxygen on your trip.**

- Ask your doctor what flow rate to use during your flight. Be sure to carry several copies of your oxygen prescription with you. The airline and providers at your destination will need this information.
- Request a direct flight, if available.
- Airlines may require you to use and pay for their oxygen on the plane.