Oxygen Concentrators

Patient/Caregiver Instruction Material

An oxygen concentrator is a machine that separates the oxygen from the nitrogen in the air, concentrates it, and stores it for you to breathe. It provides almost 100% oxygen concentrations. The use of this device does not reduce the oxygen in the room because of the small amount of oxygen it requires to generate enough for you to use.

Turning ON Oxygen

- Plug the concentrator into a properly grounded electrical wall outlet. Do not use an extension cord.
- Turn the switch to the ON position.
- Adjust the flow adjustment knob until the flow meter registers the flow rate prescribed by your physician. Your physician prescribed a flow rate of liters per minute.
- Attach the tubing from your cannula (nasal prongs) to the oxygen outlet.
- Put on the cannula and adjust for comfort.

Turning OFF Oxygen

- Remove the nasal cannula.
- Turn the concentrator power switch to the OFF position.
- It is not necessary to turn the flow control OFF after it has been set up properly. It should be checked, however, each time the concentrator is turned ON, and again periodically during use. The flow control may require adjustments from time to time.

If the Alarm Sounds

Your oxygen concentrator is equipped with an alarm to alert you in case of a power failure or an equipment malfunction. If the alarm sounds, first check to see that the power cord is still connected to the electrical wall outlet. Then, quickly check other electrical appliances in the home to determine if there is power failure. If there is a power failure, turn OFF the concentrator to stop the alarm. Then turn on your back-up system and connect your oxygen tubing to it. Notify our office of the malfunction immediately.

If you find it necessary to use your back-up system during several intermittent short term power failures, it is important to check the pressure gauge to ensure that you have an adequate supply of back-up oxygen. Please follow the instructions provided for your back-up system to determine the amount of oxygen you have left.

Cleaning and Maintenance
You will need to clean the inlet air filter twice each week. This sponge-like filter should be removed and washed under running tap water. Be sure to shake out the excess water or dry it by scrunching it in a hand towel before replacing the filter. The concentrator should never be used without this filter in place. You should also wipe down the outside of the concentrator with a damp cloth periodically.

Other Important Information
Never place your concentrator directly against a wall, drapes, or other objects. There must be sufficient space to allow free circulation of air around all sides of the unit. You may notice some heat from the unit, but this is normal.

Keep in mind that oxygen is classified as a drug and that you should follow your physician's prescription very carefully regarding the amount of oxygen to use and how often to use it, as you would with any other drug.

Oxygen Therapy

General Information
Physician's Prescription:

Oxygen is classified as a drug and must be prescribed by a physician. Like other drugs it is important that you use oxygen exactly as your physician prescribes. A flow rate, in liters per minute, has been prescribed to provide additional oxygen for you. This flow rate should not be changed without permission from your physician. Too much oxygen can be just as harmful as too little.

In addition to an exact flow rate, your physician may specify the length of time that you are to use the oxygen each day. You should attempt to follow the instructions as closely as possible.

Safety Precautions
Oxygen does not explode, and it does not burn, but it supports combustion and will make a fire burn much faster and hotter. To avoid the chance of fire and other possible hazards associated with oxygen follow these rules:

- DO **NOT** permit open flames or smoking in the room where oxygen is being used or stored.
- DO **NOT** use electrical equipment in an oxygen-enriched atmosphere. (Examples: electric shavers, electric blankets, electric heating pads, etc.) Keep these appliances at least 5 feet from any oxygen source.
- DO **NOT** use any petroleum-based products such as oily back rubs, lotions, creams, or Vaseline while receiving oxygen. DO **NOT** handle or allow others to handle oxygen equipment with these substances on the hands.
- DO **NOT** use aerosol sprays in the vicinity of oxygen
- DO **NOT** use alcohol or alcohol-based products, or products containing either or other flammable components in the vicinity of oxygen.
- DO **NOT** oil or grease oxygen equipment.
- DO **NOT** allow oxygen tubing to be covered by bedding or any other objects.
- DO **NOT** route longer oxygen supply tubing under carpet or furniture.
- DO **NOT** leave oxygen on when not in use.
- DO **NOT** abuse or handle oxygen containers roughly.
- DO **NOT** allow untrained people to use or adjust equipment.
- DO **NOT** attempt to repair oxygen equipment
- DO **NOT** place oxygen equipment near radiators, heat ducts, stoves, or any other source of heat.
- DO **NOT** open cylinder valves quickly.
- DO **NOT** transport oxygen in an enclosed area such as the trunk of your car
- DO use a stand for all oxygen cylinders or secure them with a belt, chain, or rope.
- DO use all cotton clothing and all cotton bedding to avoid sparks from static electricity. Avoid the use of nylon and other synthetic fabrics as well as wool.
- DO keep oxygen equipment out of reach of children.
- DO keep oxygen equipment free of dust by wiping it off periodically with warm water. A mild household detergent may be used if necessary.

Never change your flow rate of oxygen from what your physician has prescribed without first calling your physician to discuss why you think you need more oxygen!

Facts About Your Humidifier

Only use distilled water.
A humidifier is often included as part of your oxygen equipment. A humidifier is a bottle or jar that is filled with water and attached to the oxygen system to moisten the oxygen before you inhale it. Medical oxygen is completely dry and breathing this completely dry gas at flow rates greater than 4 liters per minute may cause discomfort. You should use the humidifier provided if you experience any nasal dryness or discomfort.

If you use a humidifier, it should be always kept clean. Bacteria can grow in the water and on the wet surfaces in the moist environment of the humidifier. This bacteria growth can lead to infection.

Humidifier Care

- Add water to your humidifier EVERY DAY. Do not overfill.
- Your humidifier should be thoroughly cleaned and sanitized at least once a week.
- Disassemble the humidifier: there are two parts (the bottle and the cap with the stem attached).
- Avoid touching any of the internal parts of your humidifier with your hands or allowing them to touch the surfaces of counter tops, sinks, etc. when you are adding water or when you are cleaning and sanitizing.

Cleaning Instructions
To clean your humidifier, you will need:

- Dish washing detergent
- White vinegar
- A small brush (a bottle brush or toothbrush)
- Two basins or buckets (Tupperware containers of the appropriate size are ideal)

Basin #1 contains detergent water. This detergent solution should be discarded after each cleaning.

Basin #2 contains a solution of one-half white vinegar and one-half water. Make sure you have enough solution to cover the disassembled humidifier completely when soaking. This solution is good for one week if stored in a covered container.

Cleaning Steps

1. Wash the disassembled humidifier in warm sudsy water. Use a brush to remove any residue.
2. Rinse all parts thoroughly under clear, hot running water.
3. Soak all parts in vinegar solution of one-part white vinegar, and one part water for 30 minutes. Make sure all parts are completely immersed in the solution
4. Rinse all parts thoroughly under clear, hot running water.
5. Lay the parts on a paper towel in a clean area and allow them to dry.
6. Reassemble parts and store them in equipment bag.

The Cannula and Extension Tubing

The cannula is the nose piece or nasal prongs that deliver oxygen. The two prongs fit into the nose to supply you with oxygen. The other end has a connector that attaches to the extra tubing, the nut & nipple, or the humidifier, depending on which is used. You should clean the cannula daily by wiping the prongs with a clean damp cloth. Use a new cannula once every two weeks and discard the old one. Extension tubing should never exceed 50 feet in length. The use of extension tubing greater than 50 feet can result in a decrease in the flow of oxygen provided to you. You should change your extension tubing approximately every three months.

Oxygen Supplies Tip Sheet

The following instructions provide guidelines for routine cleaning procedures and use of supplies for the oxygen equipment provided to you.

- Cannulas — Change the cannula (nosepiece) every 2 weeks.
- Reusable humidifier bottles provided — Clean the humidifier bottle and re-sterilize in a solution of vinegar and water every 7 days. Fill the bottle with clean boiled or distilled water. If using boiled water, be sure to let the water cool before filling the humidifier. Use of a humidifier is not

	required. You should use a humidifier only if you experience nasal irritation or dryness.
• 25 to 50 feet sections of extension tubing	Change every two months. Never use more than 50 feet of extension tubing in addition to your cannula. If you do, you may not get the proper flow of oxygen that your physician has prescribed for you.
• Water traps	Clean and re-sterilize in a solution of vinegar and water monthly. Replace as necessary
• Large oxygen cylinder	This tank is provided for EMERGENCY use only. It should be used when the concentrator is unavailable, such as during a power outage or equipment malfunction. The tank will be replaced as necessary.
• Concentrator filter cleaning	The (non-disposable) filter should be cleaned and checked at least once per week. The actual need for cleaning is very dependent on the amount of dust in the air. The filter may be cleaned by rinsing with warm water. Make sure the filter is dry before replacing.

Please review the user manual provided for more detailed instructions regarding your new equipment
or contact our office. Thank you.