

Oxygen at Home

Your physician has prescribed supplemental oxygen for you to help your breathing. You will be receiving this oxygen by a concentrator, with portable tanks, or with liquid oxygen. If you experience any problems with the equipment or you have any questions, call us. We are available 24 hours a day, seven days a week. If you ever experience severe shortness of breath, immediately contact your physician and/or emergency rescue services.

Valley Respiratory Services and S.T.A.R.S. Healthcare provides the finest, state of the art medical equipment as well as the support essential to the success of your health and well being. Supplemental oxygen can help improve shortness of breath, fatigue, loss of memory, or confusion caused by a lack of oxygen. It is important that you use the oxygen dosage your physician has prescribed. Too much or too little oxygen can be harmful. **Never change your liter flow without permission from your doctor.**

Here are some tips to help with using your oxygen:

1. **NEVER, EVER** smoke while on oxygen. Never allow someone else to smoke around you while you are on oxygen. Oxygen won't ignite by itself but is combustible in the presence of open flames.
2. Post "No Smoking" signs on your front door or window.
3. Stay at least 10 feet from gas stoves, candles, lighted fireplaces, or other heat sources.
4. If you are on a concentrator, notify your electric company so they can put a priority on your house in case of a power failure.

APS – (602) 371-7171 SRP – (602) 236-8888

5. Call a few days ahead for oxygen refills. This will prevent you from running out. The main number for Valley Respiratory is 480-830-7700. The automated voice attendant will prompt you what to press if you call after hours, weekends, or holidays.
6. Keep an all-purpose fire extinguisher nearby in case of a fire.
7. If you are planning a trip, contact Valley Respiratory in advance and we can help provide resources and information regarding traveling with oxygen.
8. It is important to follow your doctor's orders regarding how often you should be wearing your oxygen and how much oxygen you should be using.
9. If you have questions regarding this contact your doctor to discuss it with them.

Cleaning Instructions for Your Oxygen Equipment

1. Unplug and wipe down your concentrator every day with a damp cloth to prevent dust buildup which can affect the operation of the unit.
2. Clean your nasal prongs at least once a week by wiping with a damp cloth.
3. Wash your humidifier between every refill with warm soapy water and rinse thoroughly before refilling. Once a week, sanitize it by soaking it for 5 minutes in 70% Isopropyl Alcohol. Rinse well with HOT water and air dry before refilling it.
4. Always use sterile or distilled water to fill your humidifier.
5. Wash the filter for the concentrator twice a week with warm soapy water, rinse thoroughly, squeeze excess water from filter and let air dry.
6. Good hand washing is the single most important thing you or your caregiver can do to prevent infection.

Attaching Regulator to Cylinder/Changing Cylinders

1. Remove the plastic wrap from the new cylinder. Set the grey washer aside if the regulator has a washer installed already. If not place the grey washer on the large pin inside the regulator or conserving device.
2. Lower the regulator or conserving device over the top of the cylinder.
3. Align the pins in the regulator or conserving device to the holes in the cylinder post.
4. Hand tighten the T-handle of the regulator or round knob of the conserving unit.
5. Open the cylinder by using the wrench provided or by turning the toggle valve to the left. If there is a loud hissing noise immediately turn the wrench to the right turning off the cylinder. This means the pins were not aligned, the washer is missing, or the regulator was not tight enough to seal on the cylinder post.
6. If the needle on the gauge goes into the green zone that means the tank is full and ready. Turn the flow gauge to the order liter flow (i.e.1, 2, 3 liters per minute) and attach the cannula to the regulator or conserving device.
7. If you have a conserving device it is necessary to turn the switch to on to activate the conserving unit.
8. Breathe Normally.
9. When you are finished using your oxygen conserving device, turn your cylinder to the closed position by turning the wrench or toggle valve to the right until tight. Turn the rotary flow control to "0".

Safety Tips for using Oxygen Tanks

1. Avoid tipping the tank over.
2. The tank should always be kept in the stand or cart provided to avoid tipping.
3. You should only move tanks as instructed by your home healthcare respiratory therapist.
4. Tanks should not be stored in confined or unventilated area.
5. Tanks should not be stored near flammable substances or heat/ignition sources.
6. Tanks should not be stored in the trunk of a car.
7. Always secure tanks in a moving vehicle to avoid falling or tipping over.

Do's and Don'ts with your Oxygen

1. **Don't** ever change the flow rate of your oxygen unless directed by your physician.
2. **Don't** use alcohol or other un-prescribed medicines that can make you drowsy as they will slow your breathing rate.
3. If you experience dryness around your lips or under your nose from the oxygen, try using water based lubricants (i.e. KY Jelly). **DO NOT** use petroleum based lubricants (like Vaseline or Chapstick).
4. If you have persistent redness under your nose contact your physician. They might be able to prescribe something to help.
5. Make sure your concentrator is placed at least 6 inches away from the wall on the sides and back. This will prevent heat build up and increased energy usage. Always turn off your concentrator when not in use.
6. Call your physician if you experience headaches, anxiety, blueness around lips or fingernails, drowsiness, confusion, restlessness, or difficulty breathing.
7. Call Valley Respiratory (480-830-7700) if your equipment does not seem to be working properly or if you have questions about your equipment.
8. **Do** use care when changing oxygen tanks. If knocked over and damaged, the gas can escape, making the cylinder act like a rocket and cause harm or injury.
9. Notify the fire department that you are using oxygen in your home.
10. **Don't** ever use an extension cord with the concentrator and don't plug other devices into the same outlet.

If you have any questions or concerns call the Valley Respiratory main number at 480-830-7700 Monday through Friday 9:00 am to 5:00 pm. If you call after hours, on weekends, or on holidays, the automated voice attendant will prompt you what to push to reach the Respiratory Therapist on call.

If you have any trouble breathing or if you are experiencing shortness of breath, call your doctor right away.

Traveling with Oxygen

Early planning and preparation are the keys to a successful trip. You should consult your doctor to make sure your trip is medically safe for you. You will need a copy of your oxygen prescription for the airline. Contact Valley Respiratory to help assist you with getting oxygen refills while on your trip. It is a good idea to have extra cash available to pay for oxygen refills or extra equipment if necessary.

Traveling by Car or RV

1. Remind passengers not to smoke in the car.
2. Securely fasten tanks.
3. Always keep one window partially open for ventilation.
4. Do not store oxygen in the trunk of your car.
5. Do not store tanks near gas or open flame.
6. Check your trip plans for changes in altitude. There is less oxygen available at high altitude.

Traveling by Bus/Ship/Train

1. When you make your reservation, request to talk to someone regarding the use of oxygen and special accommodations.
2. Most companies require at least 2-3 weeks notice if you are going to be using oxygen on the trip but some cruise ships require 6-8 weeks or notice.
3. Most companies will allow you to bring your own oxygen but make sure to check with them ahead of time to make sure.

Traveling by Airplane

1. Try to schedule a direct flight with no layovers or stops.
2. Most all airlines allow one or more brands of Portable Oxygen Concentrators (POC's) Check with your airline as to what brands they allow.
3. Insurance will NOT cover one of these if you are already on oxygen. Rental rates vary from \$200/week to \$300/wk depending on the unit and if you need extra batteries.
4. All of the POC's have different features. If you are going to use one of these for a trip make sure you get familiar with how to use it before your flight. All run on batteries but the battery life varies a great deal between the units. We can help you find the one that is right for you.
5. Most Airlines require a form to be filled out by your doctor showing medical necessity and that you are able to operate the unit yourself. Each airline has a different requirement for this form as to what they will accept.
6. Most airlines do not offer oxygen in flight any more. All carry oxygen for emergencies but do NOT make it available unless it is an emergency. If that happens they may land the plane and take you to the closest hospital for treatment not continue on to your destination.
7. Charges for oxygen if they offer it range from \$150 to \$500 for each leg of your trip. ALL insurance plans do not pay for this charge.
8. All airlines require advance arrangements when you are traveling with oxygen. **Call at least a month ahead**, so you will have time for your doctor to complete any necessary paperwork. Some airlines have a medical or special services department that handles these requests.

See your doctor before you fly to get final advice from their office. There is less oxygen available in the pressurized air of an airplane cabin (the plane is pressurized to 8000 ft elevation) you may need supplemental oxygen even if you don't usually require it during the day. Sitting in the airplane is the equivalent of going up to Flagstaff in the mountains. The air inside airplanes is drier than normal, which can dry your lung secretions. Smoking is not permitted on any domestic flights. Your doctor can advise you on all of these considerations. Get to the airport even earlier than they recommend. Extra delays are common when traveling with oxygen. Try to stay relaxed and be well prepared and your trip will be more enjoyable.

Pursed Lip Breathing

What is Pursed Lip Breathing?

Pursed-lip breathing is an exercise that can help you breathe more effectively, allowing you to get the oxygen you need into your lungs. It trains you to exhale more completely, so that you breathe easier, less often, and at a normal rate, whether you are resting or moving about. This breathing exercise may help you feel better physically and mentally. When you are less short of breath, you can probably walk farther, climb stairs easier, and exercise more in general - this could give you a healthier life.

How does it work?

Pursed-lip breathing helps strengthen the muscles you use to breathe. The largest and most important of these muscles is your diaphragm, located under your lungs. Normally, the diaphragm is curved. With certain types of lung disease the lungs become "over inflated" and do not empty out as well when you exhale. Air stays trapped in your lungs and the diaphragm flattens out. Because of this, your lungs and diaphragm are already in an inflated position even before you breathe in. This is what makes you short of breath. Pursed-Lip breathing causes you to contract your abdominal muscles when you breathe out. This forces your diaphragm upward, and helps empty your lungs. As a result, you breathe more slowly and more efficiently. Pursed-Lip breathing may also prevent collapse of the air passages in the lungs. This may help you maintain good airflow and blood flow throughout your lungs.

What happens if I don't Exercise my breathing muscles? Many people who have mild to moderate shortness of breath believe exercise is harmful to their lungs and heart. They feel that if they take it easy and don't "overdo it," they will enjoy life more. *This is far from the truth!* The less active you are, the more short of breath you will be, even during mild activity.

On the other hand, breathing exercises can help reduce shortness of breath and can help you be *more* active. In addition, since physical movement is needed for work, recreation, travel, and sex, breathing easier during these activities can help you to enjoy life more.

How do I practice Pursed-Lip Breathing?

Your body may be telling you that pursed-lip breathing is best for you, so you might already be practicing this breathing method. But to get the most out of it follow these steps:

1. Breathe in deeply and fully through your nose for 1-2 seconds. You might be able to breathe in more air if you lean forward slightly.
2. Hold your breath briefly for 1-2 seconds.
3. Purse your lips as though you are whistling, and breathe out slowly through your mouth for 6-8 seconds. Use your pursed lips to resist the speed of air being forced from your lungs.
4. Repeat. This time, place 3 fingers over your lips and notice the resistance.
5. Practice this technique for 5-10 minutes, 2-4 times a day.
6. Use this breathing exercise every day - or as needed - especially during exercise, such as stair climbing or walking on level ground. Pursed-lip breathing is also helpful whenever you are short of breath.

Coughing

Huff coughing is a way to clean mucus from the lungs without forceful, tiring coughing. Huffing helps to push the mucus from the outer, smaller airways toward the larger airways so you can cough it out more easily. A huff is a single, continuous movement not a series of short, sharp puffs or pants.

Procedure:

1. Take a medium to large breath in and hold it for 2 to 3 seconds.
2. Using an open mouth, squeeze, squeeze, squeeze the air out like fogging up a mirror.
3. Another way is to take a large breath in and blow out hard through pursed lips.
4. Repeat this 3-4 times.
5. Cough to clear mucus. Focus on keeping your head up, not doubled over, while coughing. Pause and breathe in slowly and gently between coughs to catch your breath and rest. This controlled, gentle breathing helps to avoid fatigue and coughing spasms.
6. Repeat steps 1-4 until mucus is cleared.

Additional Tips:

1. Take different size breaths before huffing to remove even more mucus.
2. Drink lots of water before coughing to wet your throat. This helps the mucus come up easier.

Contact Valley Respiratory at 480-830-7700 or 623-930-1225 if you are going to be flying and you are on oxygen. We can help provide the phone numbers for the airlines and help coordinate getting oxygen at your final destination. We also have information on particular requirements of certain airline carriers and cruise ships. There is a good resource on the web at www.breathineasy.com for additional information.