Home Oxygen Therapy

Oxygen is a medical gas ordered for your child by the doctor. The amount of oxygen your child needs is determined by pulse oximetry. A pulse oximetry device is a lighted probe that attaches to your child's finger or toe to measure the amount of oxygen in their blood. This is usually done at the hospital or your doctor's office. The prescription for the flow of oxygen is written as "liters per minute" (lpm). **Do not** change the prescribed liters per minute unless you talk to your doctor first.

When your child receives oxygen therapy at home, it is important that you are aware of the signs and symptoms that can occur when the body's oxygen level is low. Prior to discharge from the hospital, watch how your child looks with a good oxygen level. This is a "normal level baseline" from which you can compare if there are concerns at home.

Oxygen dose:

Your child's doctor has ordered an oxygen liter flow of _____ per minute to be given _____

Call your oxygen company as soon as you get home, so they can bring you more tanks!

Oxygen supplier _____ Phone _____

Signs of low oxygen levels (hypoxia):

- High heart rate
- Faster than normal breathing
- More fussy than usual or unable to be calmed
- Increased work of breathing (the skin pulling in at the neck, ribs or stomach, or use of stomach muscles to breath out)
- Changes in the amount or frequency of feedings, or loss of appetite
- Changes in color: pale, blueness in or around the lips, gums, tongue or nail beds

You may have seen some of these signs in your child while in the hospital. If you are not sure what to look for, ask your doctor, nurse or respiratory therapist.

Things that can worsen your child's condition

- Upper respiratory infection such as a cold
- Lower respiratory infection such as bronchiolitis or pneumonia
- Going to a higher altitude

If any of the symptoms listed above appear, check to make sure that all connections are secure, there are no knots or kinks in the tubing, and that oxygen is flowing. If the oxygen seems to be flowing correctly, slowly increase the flow of oxygen until the symptoms improve and call your doctor.

Before going to a higher altitude such as the mountains, contact your doctor for instructions on adjusting the oxygen flow rate. With guidance from your doctor and close observation by you, your child may be able to handle higher altitudes.

Portable Oxygen Tanks:

The oxygen inside the tank is under a lot of pressure and is measured in pounds per square inch (PSI). The tank is made of metal and a full tank weighs between 8 and 15 pounds. It has five main parts:

1. **TANK ON/OFF VALVE:** Allows you to turn ON and OFF the oxygen.
2. **CYLINDER/TANK WRENCH:** A tool that fits on the tank on/off valve to help you turn **on** and **off** the oxygen.
3. **REGULATOR:** A dial that attaches onto the oxygen tank. It shows you how much oxygen is in the tank and allows you to adjust the oxygen flow.
4. **OXYGEN FLOW CONTROL:** Adjusts the flow of oxygen to the prescribed liters per minute (lpm).
5. **OXYGEN OUTLET:** Connect your oxygen tubing to this port.

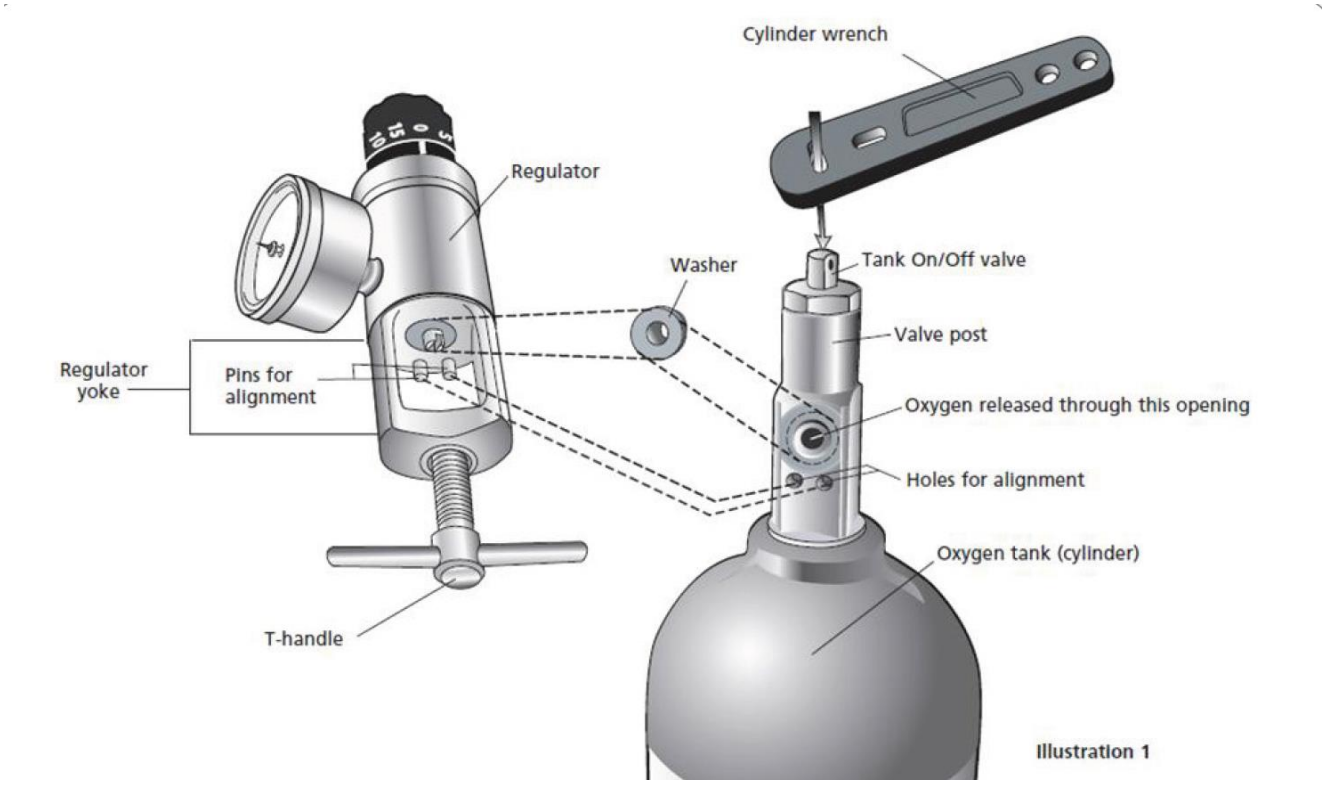

Illustration 1

Follow these steps to use your portable oxygen tank:

1. Check the amount of oxygen in your tank.
   - Make sure the tank is upright.
   - Place the tank wrench onto the tank on/off valve and turn counterclockwise.
   - Read the regulator dial. The needle should read close to 2000 PSI.
2. Turn on the oxygen flow control to the ordered liter per minute flow. Be sure to listen and feel for continuous oxygen flow at the oxygen outlet for 30 seconds before attaching the oxygen tubing.

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- If the flow stops or the needle on the dial is going down, there is likely a leak. Use the wrench and make sure the on/off valve is completely open and make sure the regulator is fitted correctly on the tank.
- If it looks like the regulator is not fitted correctly on the tank or you have any other problems call the oxygen supply company to troubleshoot.

3. Attach the oxygen tubing to the oxygen outlet.

How to switch the regulator to a new oxygen tank:

When your home care company comes to your home, they will give you a new oxygen tank. You will need to move the regulator from the old tank to the new one. You will also need to follow these steps anytime your oxygen tank is empty and you need to switch to a new one.

1. Make sure your oxygen tank is closed by turning the valve on the top to the right using the cylinder wrench
2. Get rid of any oxygen left in the regulator by turning up the flow until you hear it stop flowing and the dial returns to 0 (zero).

   *Make sure the dial is at 0 (zero) before moving to the next step.
3. Remove the regulator by turning the T-handle just enough to lift the regulator off the tank.
4. Make sure the washer is in place over the large hole on the regulator above the pins.
5. Slide the regulator onto the new oxygen tank so the pins are fully in the holes, turn the T-handle until the regulator is tight against the tank.

SAFETY: Oxygen isn't flammable. However, oxygen will cause anything that is burning to burn hotter and faster.

- **Do not** smoke or allow anyone else to smoke in the same room or car as your oxygen equipment.
- Your home care company will give you NO SMOKING signs to place on your door.
- Do not use any friction toys or gadgets that could cause a spark around oxygen.
- Do not use oil-based creams and lotions like petroleum jelly on your skin– Use water-based creams and lotions instead.
- Keep cylinders and oxygen tubing **at least 10 feet away** from **any** source of heat.
  - If you have a wood stove or fireplace, be sure that the fire box is enclosed, or a screen is in use.
  - If possible, keep your child out of the kitchen when cooking on the stove, especially frying. If your child must be in the kitchen, keep them at **least 10 feet away** from the stove.
- Keep oxygen equipment away from flammable materials such as grease, oil, aerosols, paints, gasoline or solvents.
- Check the label on the products before purchasing. Some recommended nonpetroleum-based products include:
  - Burt's Bees, Nasal Moist, Cann-Ease
  - Aloe vera based products
  - Any water based product without additional petroleum based ingredient

Important: Do not smoke around your child, sparks from cigarettes are impossible to control and your child should never be exposed to second-hand smoke.

Storage:

- Make sure the tank is stable **at all times**
- Keep it in the provided carrier and **do not leave it standing by itself**
- **Do not store your oxygen equipment in a small storage area** such as a closet or the trunk of a car as any oxygen that leaks out of the cylinder can create a fire hazard

On your way home:

- Do not smoke in the car.
- Keep one window partially open.
- Keep the oxygen tank, laying on its side where it cannot roll around. Use a restraining device such as seat belt or use soft clothing, blankets or towels to secure on floor, behind seats to prevent rolling.

How long your tank will last:

Liter Flow (lpm)	Tank Size D	Tank Size E
0.03=1/32	8d	10d, 16hr
0.06=1/16	4d	5d, 8hr
0.13=1/8	48hr	2d, 16hr
0.25=1/4	24hr	1d, 8hr
0.5=1/2	12hr	16hr
1	6hr	8hr
2	3hr	4hr
	d=days	hr=hours
*all times are approximate		

YouTube Video Link: Instructions for Using Your Oxygen Tank-

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