Understand and Respect the Power of Oxygen

Oxygen is all around us; it enables us to live on Planet Earth. But if you have been prescribed concentrated oxygen therapy, delivered via cylinder, concentrator or liquid reservoir, you need to understand and respect the power of oxygen.

VITAS Healthcare has provided oxygen therapy to patients for 40 years. We know how life-sustaining it is. We know how to maintain the equipment. We know how to educate patients and their families to use it safely and responsibly.

How to Use an Oxygen Tank Valve

Open the Valve Slowly and Completely

Every oxygen tank or cylinder has a valve that controls the amount of oxygen released. Always open that valve slowly and completely.

Here is why: Oxygen molecules are compressed under extreme pressure inside the tank. When the valve is opened quickly or only partially (or if the valve is broken off in a fall, drop or collision), the molecules inside are set in motion, bumping up against one another in the regulator and the valve. They create enough heat to ignite anything they come in contact with. Even particles of dust in the valve can ignite an oxygen-enriched fire.

By opening the valve slowly and completely, you ensure that the oxygen is released safely.

Never Use Lubricant or Oil

In addition, never use any lubricant or oil on oxygen cylinders or regulators. Oxygen lowers the ignition point of oil and hydrocarbons to room temperature. That means that when oxygen comes in contact with the lubricant, the mixture will burst into flames, igniting any nearby materials.

Oxygen Tanks Require Special Care When Traveling

Many hospice patients require the use of medical-grade oxygen tanks, which require special care when transporting in a car.

Follow these steps to ensure the safety of yourself and those near you:

1. To transport an oxygen cylinder, firmly secure it on the floor of the back seat.
2. The car must be well ventilated to prevent oxygen and heat from collecting inside; leave a window open at least an inch or two.
3. Never transport oxygen in the trunk of a car or bed of a truck. In a rear-end collision, an oxygen cylinder can explode, injuring people inside and even outside the vehicle.

‘Medical-grade oxygen is not like the air we breathe.’
Oxygen Tanks are Powerful; Store Them Safely

Even when storing medical-grade oxygen tanks in a home, caregivers or loved ones should take precautions to ensure the safety of those nearby.

Follow these steps when storing oxygen tanks:

1. Consider an oxygen container a “sleeping giant.”
2. All oxygen cylinders should be secured in racks or stands to prevent them from tipping over.
3. If a large cylinder is knocked over and its valve breaks off, it can accelerate to 40 MPH in a half-second and has the power to break through two cinderblock walls.

Turn it Off: A Patient’s Advice about Oxygen and Smoking

“My wife and daughter put me out and called the ambulance,” says Gary, a VITAS patient who accidentally smoked while the oxygen tube was still in his nostrils.

Gary lived to tell the painful tale of causing his oxygen delivery system to ignite a fire with a cigarette.

“I woke up to a big blaze in my face,” he says.

“I thought I was a smart enough individual that it wouldn’t happen to me,” he says. He didn’t think he needed to turn the machine off, just remove the tube from his nose and “throw it on the floor a good distance from me.”

Gary learned that wasn’t good enough, and he changed how he did things. He turned the machine off before smoking. Gary tells his story in hopes that it won’t happen to someone else.

Oxygen and Fire Safety Tips

1. Never smoke while using oxygen
2. Warn visitors not to smoke when you are using oxygen
4. Emergency personnel and visitors need to be aware of the presence of oxygen in the home
5. Keep a fire extinguisher nearby
6. Use smoke detectors and maintain them (check them and replace batteries regularly)
7. Do not run oxygen tubing or electric wires under rugs, blankets, cushions, furniture
8. Keep oxygen 10 feet from any source of heat
9. Oxygen should be stored in well-ventilated areas. Do not store in a closet or under the bed.
10. Oxygen should be used in well-ventilated areas. It builds up and concentrates around clothes, curtains, bedding.
11. Know what is flammable, and know what serves as a source of ignition:
   - Use a properly grounded electrical outlet
   - Electric appliances can spark and ignite an oxygen fire
   - Aerosol sprays, paint and thinner, Vaseline® and Vicks® VapoRub™ are easily ignited

Through our Home Medical Equipment (HME) teams, VITAS® Healthcare provides home medical equipment, including oxygen tanks, to our patients as part of the Medicare hospice benefit. Our dedicated team members also provide training and support on using the equipment. For information, call 866.405.3986.