

A Firefighters Guide to Educating Occupant(s) on the Hazards of Smoking and Home Oxygen Use

Purpose –

People who smoke while on home oxygen put more than themselves at risk. They pose a threat to public safety – to other people.

The Fire Service cares about you (the patient), your family, your pets, and the other people who live in this building.

Our goal is to provide education on the safe and proper use of oxygen in the home and to bring awareness of the extreme dangers of using oxygen while smoking or in the vicinity of someone who is smoking or when using oxygen near an open flame or heat source.

Step #1 – Introduction

- **Introduce yourself**
 - √ Be professional and courteous
- **Explain the purpose of your meeting**
 - √ Time goal of meeting: **approx. 10 mins**

Step #2 - Educate occupants on the safe and proper use of oxygen in the home

- **Explain the role of oxygen in a fire**
 - √ Oxygen is one of the main components of fire.

- √ The normal air around you contains almost **21%** oxygen.

Medical Oxygen is **100%** Oxygen. Medical Oxygen use increases the oxygen levels of normal air inside of a structure.

- √ Many items that would not normally burn in normal air will ignite more easily when increased oxygen levels are present.

When oxygen is used in the home, it creates what firefighters call an “oxygen-enriched environment” where things ignite much more easily. Oxygen lowers the temperature at which everyday household objects will start to burn – things such as furniture, bedding, clothes and even a person’s hair.

- **Advise that home oxygen use can be safe when fire safety rules are followed**

- √ While oxygen itself does not burn, it helps things burn faster and hotter. Fire in an oxygen-enriched environment not only starts more easily, but helps things burn more vigorously and at higher temperatures.

- √ Keep **all** ignition sources away from oxygen.

All sources of ignition such as matches, lighters, candles, gas stoves, appliances, electric razors, hair dryers should be at least **10 feet** from the point where the oxygen comes out. Don’t wear the oxygen while cooking or near a woodstove or a candle.

- √ **Do not** allow occupants to smoke in homes where medical oxygen is being used.

Instruct occupants who must smoke to smoke outside, only after discontinuing their oxygen use for at least 10 minutes prior to lighting up.

- √ Oils, grease and petroleum products can spontaneously ignite when exposed to high oxygen concentrations. Avoid using oil-based lotions, lip balm, petroleum jelly or aerosol sprays.

- **Verify that an “OXYGEN IN USE” sign is visible on the front door.**

- √ Inform occupant(s) that the purpose of this sign is Firefighter Safety.

The presence of oxygen in a building that is burning increases the risk to firefighters. The following hazards are present in an oxygen-enriched environment:

- Protective clothing that firefighters wear become more easily ignitable
- Oxygen cylinders exposed to heat can explode sending shrapnel flying

- Fires will burn at a hotter temperature and move faster.
- √ An “OXYGEN IN USE” sign visibly placed on the front door warns firefighters to use extreme caution due to oxygen being used inside.
- **Educate occupant(s) on additional fire safety practices.**
 - √ Always maintain “working “ *Smoke Detectors*.
Offer to test their smoke alarms.
 - √ Have a *Home Escape Plan* in place and encourage occupants to practice often.
Ask them what is their home escape plan?
 - √ Review the procedures of “*Stop, Drop & Roll*” with all occupants.
Offer to demonstrate Stop, Drop & Roll.

If an Occupant using Oxygen is a “Smoker”... Go to Step #3

Step #3 - Educate on the Hazards of Smoking and Oxygen Use.

- **Advise occupant that smoking while using oxygen is *Dangerous*.**
Statistics – Since 1997 there have been 24 fire deaths and over 50 serious injuries in fire incidents caused when patients or others were smoking while oxygen therapy equipment was in use. One fire claimed the life of a 9-year old girl. Two fires occurred in public housing units resulting in losses of over a half million dollars.
- **Inform the occupant that the safest course of action is to not smoke.**
Advise the occupant to try to quit smoking (again). Recommend that the patient contact their doctor for help. New medications are available that can be prescribed to help them quit.
Provide occupant with referral information on “Smoking Cessation Programs”.

Recommend family members stop purchasing or bringing cigarettes for the patient.

- **If an occupant must smoke (or is not ready yet to stop smoking), Instruct occupant to smoke outside.**

To reduce the risk of fire when smoking outside, an occupant must disconnect themselves from the oxygen for **10 minutes** before lighting up. Simply turning off the oxygen is not enough. It takes time for the oxygen to dissipate from your hair and clothes. Inform occupant that even these steps cannot guarantee a person's safety. The safest course of action is to not smoke.

- **Consider making referrals to the Local Elder at Risk Program.**