

SAFETY BULLETIN: SB001/21

HEALTH CARE FACILITY OXYGEN FIRE SAFETY

Oxygen is widely used to treat the symptoms of COVID-19. Some therapies use large quantities of oxygen or it is used in areas of health care facilities not designed for oxygen use. These uses can create oxygen-enriched atmospheres containing greater than 23.5% oxygen. Although oxygen itself does not burn, oxygen-enriched atmospheres can enhance combustion of items like clothing and bed linens. Even fire-resistant materials that normally do not burn in air, such as drapes and gowns, can burn in an oxygen-enriched atmosphere. To avoid incidents involving oxygen it is important to understand the associated risks.

HERE ARE CRITICAL STEPS THAT HEALTH CARE FACILITIES CAN TAKE TO REDUCE THE RISK OF MEDICAL OXYGEN FIRES:

PROVIDE OXYGEN SAFETY TRAINING

- Personnel using Oxygen and Oxygen-enriched gases shall be adequately trained and knowledgeable in Oxygen safety.
- Personnel using Oxygen equipment shall be adequately trained in its operation.

REMOVE POTENTIAL IGNITION SOURCES

- In Oxygen-enriched atmospheres, materials can be easily ignited by ignition sources such as friction, open flames, heated surgical equipment, or electrical equipment.
- Do not allow smoking, flames, sparks, or other sources of ignition in the vicinity of Oxygen use. Inform patients of the hazards and “Do’s and Don’t’s of Oxygen use.

USE ONLY OXYGEN-SAFE EQUIPMENT

Use only equipment suitable for Medical Oxygen use.

Keep hoses, cannulas and masks in good condition.

- Ensure that connections to tubing, regulators and other equipment are tight to prevent leakage.
- Check equipment prior to use for proper function. Any contaminated, broken, malfunctioning or leaking equipment should be replaced or sent for repair or cleaning.

DO NOT USE OIL AND GREASE WITH OXYGEN EQUIPMENT

- Body oils, lip balms, hand lotions, face creams, hair products, sprays and other items containing oil and grease can easily burn.
- Keep hands free of oil and grease when handling Oxygen equipment, keep oil and grease away from area where Oxygen is in use.