

HEALTH CARE FACILITY OXYGEN FIRE SAFETY

EIGA

There have been an alarming number of fires, involving many fatalities, in health care facilities where oxygen is used to treat 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.

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



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, INCLUDING THE INSTRUMENTS FOR USE AS PROVIDED BY THE MEDICAL GAS AND EQUIPMENT SUPPLIERS.



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'TS" OF OXYGEN USE.



INSPECT AND MAINTAIN ELECTRICAL EQUIPMENT



- ⚠ ELECTRICAL EQUIPMENT FAILURE WITH THE USE OF OXYGEN CAN LEAD TO A FIRE.
- ✓ ALL ELECTRICAL EQUIPMENT USED IN THE SAME ENVIRONMENT WHERE OXYGEN IS USED SHOULD BE MAINTAINED APPROPRIATELY TO ENSURE IT FUNCTIONS CORRECTLY.



USE OXYGEN-SAFE EQUIPMENT



- ✓ USE ONLY EQUIPMENT SUITABLE FOR MEDICAL OXYGEN USE.



- ✓ ENSURE THAT CONNECTIONS TO TUBING, REGULATORS, AND OTHER EQUIPMENT ARE TIGHT TO PREVENT LEAKAGE.



- ✓ KEEP HOSES, CANNULAS, AND MASKS IN GOOD CONDITION.



- ✓ CHECK EQUIPMENT PRIOR TO USE FOR PROPER FUNCTION. ANY CONTAMINATED, BROKEN, MALFUNCTIONING, OR LEAKING EQUIPMENT SHOULD BE REPLACED OR SENT FOR REPAIR OR CLEANING.



AVOID OXYGEN-ENRICHMENT



- ⚠ OXYGEN-ENRICHMENT OF THE ROOM AND MATERIALS, SUCH AS BEDDING AND CLOTHING, WHERE OXYGEN IS BEING USED CAN INCREASE THE RISK OF A FIRE OCCURRING.
- ✓ ENSURE ADEQUATE ROOM VENTILATION.



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 WHERE OXYGEN IS IN USE.

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SL 02

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DOC 04

Fire Hazards Of Oxygen And Oxygen-enriched Atmospheres

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SUPPLIER INFORMATION