



Oxygen Cylinder Safety

Intended for health workers and all personnel managing medical oxygen

Do ✓

Do not ✗

DO LEARN PROPER MEDICAL CYLINDER SAFETY HANDLING

- Read and follow the cylinder labelling instructions.



DO NOT ALTER, TRANSPORT OR HANDLE CYLINDERS INCORRECTLY

- **Do not** change the labelling or repaint a cylinder.
- **Do not** transport gas cylinders in the passenger compartment of a vehicle.
- **Do not** handle more than one cylinder at a time, or roll cylinders along the ground, except on carts designed for handling gas cylinder.



DO TRANSPORT CYLINDERS CORRECTLY

- Use personal protective equipment and mechanical assistance when handling cylinders (e.g. trolleys).
- Ensure cylinder (regardless of size) is firmly secured by a strong chain or strap, capable of preventing the cylinder from falling or being knocked over.
- Ensure valve guards or caps are fitted when cylinders are not in use or when being transported for delivery.



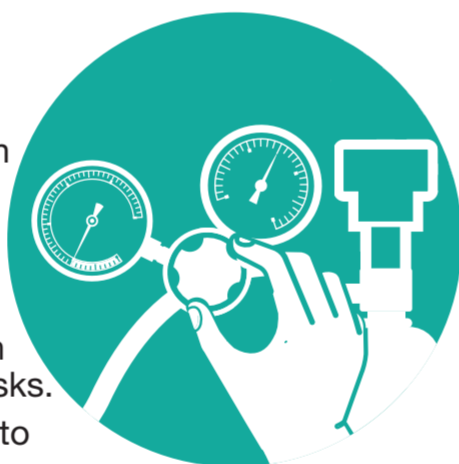
DO NOT USE UN-CERTIFIED MEDICAL OXYGEN CYLINDERS

- **Do not** refill cylinders that are not meant for medical oxygen (e.g. cylinders used for other industrial gases) and that have not passed a quality test by a specialist.



DO SET UP CYLINDERS FOR CLINICAL USE AT A SAFE DISTANCE FROM THE PATIENT

- Ensure that the gas is only turned on when it is required. Adequate valves, pressure regulators and flowmeters should be placed to control the desired rates.
- Oxygen cylinder valves should be opened smoothly to avoid (adiabatic) compression and heat generation and associated fire risks.
- Ensure adequate ventilation on the wards to reduce the risk of fire.



DO NOT USE OIL, LUBRICANTS OR ALCOHOL-BASED HAND SANITIZER ON CYLINDER'S FITTINGS



DO STORE CYLINDERS CORRECTLY

- Always physically separate full and empty medical cylinders.
- Store all oxygen cylinders in upright position and nesting, with three points of contact.
- Ensure that the storage room is well ventilated, clean and not exposed to extremes of temperature and humidity.
- Keep oxygen sources several metres from ignition sources (for example, acetylene used in maintenance).
- Ensure appropriate fire extinguishers are kept nearby and are regularly inspected.



DO NOT ATTEMPT TO REPAIR A CYLINDER OR A VALVE IF LEAKAGE IS DETECTED

- Replacement of damaged components is suggested.



Sources: WHO-UNICEF Technical Specifications and Guidance for oxygen therapy devices. https://www.who.int/medical_devices/publications/tech_specs_oxygen_therapy_devices/en/
 GOV.UK Department of Health, Medical gases – Health Technical Memorandum 02-01: Medical gas pipeline systems. Part B: Operational Management. Department of Health libraries, House of Commons library, 2006. <https://www.cganet.com/resources/safety-posters/>