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## Portable Oxygen Transport

**Purpose** Oxygen is provided for patients who require continuous oxygen therapy when they need to be removed from their primary oxygen source for transport within the hospital.

**Policy** Respiratory Care Services (RCS) supplies oxygen for the transport of patients who require continuous oxygen therapy. Critically ill patients or those with special needs (i.e. patients with tracheostomies) may require the assistance of and/or evaluation by a Respiratory Therapist prior to or during transport.

- Equipment**
- Oxygen cylinder with regulator
  - Cylinder holder

**Procedure**      **Non-Emergent Transports**

Step	Action
1	Once a request for transport with oxygen is received, obtain a portable cylinder with regulator.
2	Verify the amount of gas in the cylinder Duration of transport may be calculated using the following formulas:  <u>For an E-cylinder</u> [(PSI in tank- 500PSI) X 0.28 ] ÷ Liter flow.  <u>For a D-cylinder</u> [(PSI in tank- 500PSI) X 0.16 ] ÷ Liter flow.
3	Identify patient to be transported using two identifiers.
4	Turn on the cylinder and adjust flow meter to match the liter flow the patient is receiving. Remove the oxygen connecting tubing from the oxygen source and connect to the transport cylinder. Turn the flow meter at the wall source off.
5	Place the cylinder securely in the holder.
6	Transport the patient safely to destination.
7	Upon arrival to the procedural area or new destination, inform the nurse or attending staff that the patient has

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	arrived and is on oxygen.
8	Place the patient on the receiving area's oxygen source (wall source or large cylinder) and ensure that the flow is set appropriately and that there is adequate pressure (>1000 psi) to support the patient if using cylinder oxygen.
9	Notify RCS if cylinder change is required.

### Emergent Transports

Step	Action
1	Patients on oxygen will be transported <b><i>emergently</i></b> with a Respiratory Therapist, Nurse or Transportation personnel. It is the Respiratory Therapist's responsibility to ensure that the patient is safely and correctly connected to an oxygen source. Notify Respiratory Care Services for assistance if needed.
2	Ensure that the cylinder <b><i>is full prior to transport.</i></b>
3	Identify patient to be transported using two identifiers.
4	Verify with the liter flow required for transport.
5	Turn on the e-cylinder and adjust flow meter to match the liter flow the patient is receiving. Remove the oxygen connecting tubing from the oxygen source and connect to the transport cylinder. Turn the flow meter at the wall source off.
6	Place cylinder in oxygen holder.
7	It is the transporting therapist's responsibility to notify the therapist assigned to the patient's new location of their impending transfer so that they can ensure that an oxygen source is available in the patient's new location.
8	Turn off the cylinder
9	Wipe the tank down with a disinfecting wipe.
10	Verify the amount of gas remaining in the cylinder and return the tank to the appropriate rack.

### Cylinder

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## Management

### Cylinder Storage Requirements:

- Medical gases ***In Storage*** must be labeled as belonging to one of the following groups:
  1. Full/Partial Cylinders
  2. Empty Cylinders
- In areas of high oxygen use cylinders may be separated out into three storage racks labeled as:
  1. Full Cylinders
  2. Partial Cylinders
  3. Empty Cylinders.
- Full and partial cylinders will be physically separated from empty cylinders in appropriately labeled cylinder racks.
- ***Unopened (full) cylinders will be used for all emergent transports***
- Cylinders properly secured (i.e. on a stretcher, code cart) are considered “In Use”.
- After transports, cylinders will be wiped down with disinfecting wipes before being returned to a rack.

### Transport with Oxygen Cylinders:

- Never leave a cylinder standing free or unsecured on the top of a patient bed or cart. All gas cylinders must be stored in approved storage racks or securely restrained.
- Oxygen cylinders may not be placed in the bed with a patient during transport. Cylinders must be secured in an appropriate cylinder holder on or under the bed.

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**References**

AARC Clinical Practice Guidelines; Respiratory Care; 2002: – 2002 Revision and Update; 47(7): 721-723 In-Hospital Transport of the Mechanically Ventilated Patient

NFPA 99: Health Care Facilities Code. 2015 edition.

Palmon SC, Liu M, Moore LE, Kirsch JR. Capnography facilitates tight control of ventilation during transport. Critical Care Medicine, 1996; 24:608-611.

Szem JW, Hydo LJ, Fischer E, Kapur S, Klemperer J, Barie PS. High-risk intrahospital transport of critically ill patients: safety and outcome of the necessary "road trip". Critical Care Medicine. 1995; 23:1660-1666.

Stubbs CR, Crogan KJ, Pierson DJ. Interruption of oxygen therapy during intrahospital transport of non-ICU patients: elimination of a common problem through caregiver education. Respiratory Care. 1994; 39:968-972.