Respiratory Care Services Policy and Procedure Manual	
Policy and Procedure:	NeO2-Safe™
Area: Respiratory Care Services	Performed by: Respiratory Care Practitioners
Policy Number:	Approved by:
	Date:
Current Effective Date	Approved by:
	Date:
Review Date	Approved by:
	Date:
Revised Date	Approved by:
	Date:

POLICY

This policy assures the standardized use of the **NeO2-Safe** for use in-line in a 10 mm ventilator circuit or similar device.

PURPOSE

The purpose is to provide for an easily implemented protocol to be used by the Respiratory Care Practitioner with effective guidelines and consistent instruction for use and application of the **NeO2-Safe Manifold** with a ventilator circuit or similar device.

DEFINITION

To ensure patient safety the NeO2-Safe Manifold is used to achieve the following purposes:

- Maintain Normal Ventilation during suctioning
- Maintain PEEP/CPAP during suctioning of critically ill patients
- Maintain a closed circuit system

HOSPITAL:

- Help prevent hypoxia associated with normal suction techniques
- Aide with the instillation of surfactant and other pharmacologic agents directly into the lungs with no interruption in ventilation

SETTINGS

The **NeO2-Safe** should be placed and secured in the ventilator circuit or similar device in an environment in which the patient can be physiologically monitored and in which emergency equipment and appropriately trained health care providers with ventilation skills are immediately available.

EQUIPMENT

B&B NeO2-Safe and ventilator circuit (either permanent or disposable) with male 7mm taper slip fittings on the inspiratory and expiratory circuits to the patient manifold head and a standard pressure monitoring/sensing line.

<u>Note</u>: if no sensing line is part of the circuit, the sensing port on the **NeO2-Safe** may be occluded with the **B&B NeO2-Safe Cap** (part number 11103) (Figure 1).

<u>Note</u>: Determine compatibility of the **NeO2-Safe** to the type and manufacturer of the ventilator and circuit prior to clinical use.

PROCEDURE

A: Application Procedure/Preparation

- 1. Remove the patient manifold from the infant/neonatal circuit.
- 2. Replace the patient manifold with the NeO2-Safe (Figure 1) connecting the inspiratory and expiratory tubing to the 7mm taper joints on the manifold.
- 3. Connect the pressure sensing tubing (Figure 1) to the airway pressure connector.
- 4. Occlude the manifold and pressure test the circuit.

B: Action Steps/Application

- 1. Connect the manifold's 15mm connector to the patient's endotracheal tube and resume ventilator operation as prescribed (Figure 2).
- 2. Confirm ventilation and pressurization of the circuit.

C: Suctioning and Instillation Procedure

Note: Refer to existing hospital policies on suctioning or surfactant administration.

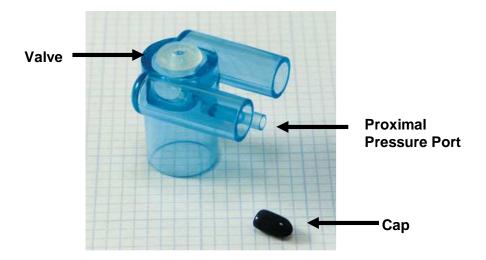
- 1. If suctioning or instillation of pharmacologics, adjust FiO2 per hospital protocol prior to the procedure.
- 2. Set up a bath of sterile distilled water to insert the catheter into prior to insertion in the valve. This enables the catheter to slip freely during the insertion and retrieval of the catheter and helps maintain the "feel" of the catheter during insertion.
 - Note: This is particularly helpful in directing the catheter into the appropriate direction.
- 3. Before suctioning/instillation of medications, wipe the outer surface around the valve (Figure 1) on the manifold with a bactericidal solution as per manufacturer's recommendation.
- 4. Instillation of Normal Saline through the port, either with Saline Bullets or a syringe, prior to suctioning may be done as long as the tip that is inserted into the body is wiped with a bactericidal solution prior to insertion.
- 5. Using sterile technique, insert either a #6 or #8 suction catheter through the valve and suction as indicated.
- 6. Apply suction all the way out to remove any secretions from the valve.
- 7. After the procedure is completed and patient's is stable, confirm the patient's condition.

D: Documentation

Chart the Time, Date, endotracheal tube size and cm marking at the appropriate anatomical landmarks on the hospital issued paper or electronic flow sheet.

E: Precautions/Adverse Effects

- 1. The NeO2-Safe valve can accommodate a max catheter size of 8F.
- 2. Change the NeO2-Safe per hospital P&P.
- 3. Use of a catheter without the distilled sterile water lubricant may shorten the life of the valve.
- 4. The NeO2-Safe Cap is intended for use with the NeO2-Safe Manifold. It fits onto the proximal pressure port and holds pressures up to 120 cm H_2O .
- 5. The NeO2-Safe is intended for single patient use.



NeO2-Safe Manifold Figure 1



Figure 2