Providence HEALTH CARE	Department:	Date Originated: June 2009
HEALTH CARE	Respiratory Services	Date Reviewed/Revised: April 2011
PROCEDURE	Topic: Neonatal – Securing Neonatal Endotracheal Tubes (Respiratory Therapy) Number: B-00-12-12088	Related Links:

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APPLICABLE SITES:

St. Paul's Hospital

GENERAL INFORMATION:

The post-insertion position of a neonatal endotracheal tube will be verified with a chest radiograph. Optimal placement of the endotracheal tube in neonates is between $T_2 - T_3$ of the thoracic vertebrae as viewed on the chest radiograph. The following table provides a guide for estimating depth of endotracheal tube insertion based on body weight:

WEIGHT (grams)	DEPTH FROM UPPER LIP (cm)
<750	6
1000	7
2000	8
3000	9
4000	10

NOTE: Neonatal endotracheal tube position will be recorded AT THE LIP.

NOTE: AN ASSISTANT IS REQUIRED WHEN SECURING OR REPOSITIONING NEONATAL ENDOTRACHEAL TUBES.

EQUIPMENT:

- Neobar securing device (colour-coded)
 - Purple: < 800 gYellow: > 800 g
- Cloth tape ½" (approx. 2 inch length)
- 2x2 gauze pads (moistened with saline)

- Scissors
- Tegaderm dressing
- Stethoscope
- Flow-inflating resuscitator with appropriately sized mask
- Emergency intubation equipment available

PROCEDURE:

- 1. Using the saline moistened 2 x 2 gauze pads wipe the surface of the cheeks where the adhesive pads of the Neobar will make contact with the skin, and allow to dry.
- 2. Prepare the appropriate coloured Neobar by exposing the adhesive pads and centre over the mouth ensuring that the endotracheal tube is inferior to the Neobar.
- 3. Press firmly on the adhesive pads to enable the Neobar to adhere to the skin surface.
- 4. Using a 2-inch length of the ½" cloth tape, wrap once around the endotracheal tube, and then wrap around both the endotracheal tube and Neobar 2 times.
- 5. Cut the Tegaderm dressing in half and apply one portion over each side of the Neobar pad to reinforce the stability of the device.
- 6. Auscultate for bilateral air entry and document tube position at the lip (ATL) on the respiratory flowsheet.
- 7. Obtain CXR and confirm endotracheal tube position is between $T_2 T_3$.

