Providence HEALTH CARE	**RESPIRATORY SERVICES**	DATE CREATED: June 2010 DATE REVIEWED/REVISED: **March 2016**
AREA PROTOCOL	TITLE: Neonatal – Area Protocol & Respiratory Therapist Role & Responsibilities for NICU NUMBER: B-00-16-12026	RELATED DOCUMENTS:

SITE APPLICABILITY:

ST. PAUL'S HOSPITAL

POLICY STATEMENT:

Respiratory Therapy services will be provided to the Neonatal Intensive Care Unit (NICU) at St. Paul's Hospital on an as needed on-call basis. Assistance with Code Pink, Code Neonate, and neonatal resuscitation will also be provided to the delivery suites and case room in the OR when requested.

The respiratory therapist will be responsible for all ventilator adjustments and adjuncts for neonates requiring resuscitation and/or mechanical ventilation until the Infant Transport Team arrives and assumes care.

The constant attendance of a respiratory therapist for the unstable critically ill neonate requiring resuscitation and/or ventilator support is crucial to the safe and effective care of the neonate. Once they have been stabilized the therapist may prioritize workload.

The respiratory therapist will provide modalities of respiratory therapy as documented in the PHC Respiratory Services Neonatal Procedure Manual. The therapist will ensure all relevant physician orders are followed, and correctly chart and document all therapeutic interventions.

PHYSICIAN ORDERS:

The respiratory therapist is responsible for ensuring existing ventilator protocols are followed and that physician specific ventilation orders are appropriately documented. Ventilator care management will be provided as per Neonatal Invasive Ventilation Using the Babylog VN500, and Neonatal Ventilation Using the 840 Ventilatory and NEOmode unless the pediatrician provides a written order indicating otherwise.

If the delivery of surfactant is required, the respiratory therapist will assist only. It will be the sole responsibility of the pediatrician to administer the surfactant.

PATIENT ADMISSION & ASSESSMENT:

A respiratory therapist will be present when requested for the admission and/or resuscitation of a neonate. The therapist will provide the services listed in the Respiratory Neonatal Procedure Manual as directed by the attending pediatrician.

All therapeutic modalities provided by Respiratory Services will be assessed by the respiratory therapist to determine the appropriateness of therapy, the adequacy of therapy and the neonate's response to therapy.

Whenever possible the therapist will remain with the neonate until the Infant Transport Team arrives and accepts responsibility, or until the infant is stable and constant attendance is no longer required.

PROVISION OF THERAPY AND CLINICAL RESPONSIBILITES:

Respiratory therapists will provide the following clinical services when requested.

1. Artificial Airway Management:

a. Assist with intubation as per B-00-12-12090
b. Assist with maintaining a patent airway
c. Secure and/or reposition endotracheal tubes as per B-00-12-12088
d. Perform suction and instillation as per B-00-12-12089
e. Perform extubation

2. Oxygen Therapy:

a. Oxygen therapy as perB-00-12-12095
b. Administration of supplemental oxygen via:
    i. NEOPUFF with mask
    ii. Flow-inflating or self-inflating resuscitator with mask

3. Ventilatory Support:

a. Initiation, maintenance and discontinuation of invasive mechanical ventilation as per B-00-12-12091 and B-00-12-12092
b. Humidification of gases during ventilatory support
c. Regular monitoring and ongoing adjustment of ventilator settings as per ventilation and oxygenation goals:
    i. pH > 7.25
    ii. pCO_2 40 – 60 mmHg
    iii. SpO_2 88 - 92% (<36 weeks gestation)
    iv. SpO_2 90 - 94% (>36 weeks gestation)
d. Perform manual ventilation using the NEOPUFF Infant T-piece Resuscitator* as per B-00-12-12097

The NEOPUFF is the preferred method of manual ventilation

e. Perform manual ventilation using a flow-inflating resuscitator as per B-00-12-12096
f. Perform manual ventilation using a self-inflating resuscitator
g. Assist with internal transports of ventilated patients

4. Diagnostic Procedure

a. Capillary/arterial blood gas review and interpretation
b. Chest x-ray review and interpretation
c. Oximetry (shared with nursing)

5. Neonatal Resuscitation

a. Respond and assist with neonatal resuscitation in NICU, OR case room, or delivery suites when specifically requested
b. Respond to Code Pink and/or Code Neonate in maternity, OR and NICU
c. Assist the pediatrician with the administration of surfactant in the event that the Infant Transport Team is delayed or unavailable as per B-00-12-12098

The physician will have sole responsibility for the administration of surfactant

6. **Other:**

   a. Multidisciplinary education and inservices
   b. Maintenance and restocking of red neonatal intubation and transport box

DOCUMENTATION:

The respiratory therapist will ensure all relevant information is documented for both communication and legal purposes.

Documentation of interventions and subsequent patient response will be done on a Critical Care Respiratory Therapy Flowsheet for all neonates for which respiratory therapists provide care. Completion of the ventilator tear-off tab for statistical purposes is required.

COMMUNICATION:

The Charge Respiratory Therapist in ICU will be the primary contact when assistance is required for a neonate. Depending upon workload, the Charge Therapist may delegate another therapist to assist in NICU, and will also arrange coverage for that therapist's area of responsibility. The Charge pager number **34340** should be used to access the Charge RT.

EQUIPMENT AND SAFETY CHECKS:

The respiratory therapist assigned to the ICU will check daily the operational capabilities of the required respiratory equipment and Drager VN500 ventilator as per B-00-12-12094, and will check for the presence of adequate supplies as per the NICU Respiratory Checklist. The checklist must be initialed daily as having been completed.

After using the Drager VN500 ventilator, the circuit, exhalation block and flow sensor apparatus will be removed and exchanged as per B-00-12-12093.

REVIEWED BY:

1. Respiratory Services, Providence Health Care