

	Department:  <b>Respiratory Services</b>	Date Originated: <b>September 1986</b>  Date Reviewed/Revised: <b>May 2010</b>
<b>POLICY &amp; PROCEDURE</b>	Topic: <u>Critical Care</u> – Area Protocol & Respiratory Therapist Role & Responsibilities for ICU & CCU  Number: B-00-16-12024	Related Links:

**APPLICABLE SITES:**

St. Paul's Hospital  
 Mount Saint Joseph Hospital

**POLICY STATEMENT:**

Respiratory Therapy Services will be provided to the Intensive Care Units at St. Paul's Hospital and Mount Saint Joseph Hospital 7 days a week, 24 hours a day. The ICU Therapists will also provide hospital-wide Code Blue response for each site. At SPH, The ICU Therapists will provide coverage to the Coronary Care Unit on an as needed basis.

The Respiratory Therapist will be responsible for all ventilator adjustments and adjuncts for those patients requiring mechanical ventilation, as well as ventilator monitoring and assessment, and for communicating their findings to the other members of the health care team in an accurate and concise manner.

The constant attendance of a Respiratory Therapist for the unstable critically care ill patient requiring resuscitation and/or ventilatory support is crucial to the safe and effective care of the patient. Once a patient has been stabilized, the therapist may prioritize workload.

The Respiratory Therapist will provide all modalities of respiratory therapy to patients under their care while adhering to existing protocols for patient assessment and treatment. The therapist will ensure all relevant physician orders are followed, and correctly chart and document all therapeutic interventions.

**PHYSICIAN ORDERS AND PLAN OF THERAPY:**

The Therapist is responsible for ensuring existing ventilatory protocols or clinical pathways are followed and that physician specific ventilatory orders are appropriately documented. Physician ventilator orders and ventilatory care management in ICU & CCU are provided under three separate categories:

1. Initial Orders
2. Ventilation and Oxygenation Goals

### 3. Weaning Protocol

All patients in ICU and CCU will be managed as per [Protocol for Ventilator Orders and Management in ICU/CCU/ED](#), unless otherwise stipulated by the critical care physician.

Physician orders must be obtained for specific diagnostic and therapeutic interventions. The Respiratory Therapist must ensure that all verbal or telephone orders are transcribed onto the Prescriber's Order Sheet.

The patient chart should be checked routinely for any relevant physician's orders, particularly with those patients that are ventilated longer term. The Medication Administration Record should also be reviewed for accuracy of respiratory medications ordered.

## PATIENT ADMISSION AND ASSESSMENT:

Respiratory Therapists will perform initial and ongoing assessments of patients admitted to ICU or CCU. All patients with an artificial airway in place and/or are receiving mechanical ventilation will be routinely monitored and assessed for adequate ventilatory parameters and patient values as per [Ventilatory Monitoring Protocol](#).

All therapeutic modalities provided by Respiratory Services must be assessed by the Respiratory Therapist to determine the goals of therapy, adequacy of therapy to meet prescribed goals, and patient response to therapy.

## PROVISION OF THERAPY AND CLINICAL RESPONSIBILITIES:

Respiratory Therapists will provide the following clinical services:

### 1. Artificial Airway Management:

- a. Assist with intubation
- b. Perform endotracheal intubation if certified under the guidelines of [B-00-12-12064](#)
- c. Perform extubation
- d. Insertion and maintenance of oral or nasal pharyngeal airways (shared with nursing)
- e. Management of endotracheal tubes, tracheostomy tubes, and tracheal stomas
- f. Assist with obtaining a patent airway using difficult airway adjuncts
- g. Assist with internal or external transports of patients with artificial airways
- h. Perform bronchial hygiene (shared with nursing)
  - i. Suctioning or Instillation

### 2. Initiation and Maintenance of Oxygen Therapy:

- a. Oxygen therapy as per [Providence Health Care Nursing Care Standard](#)
- b. Low-flow oxygen therapy (shared with nursing)
- c. High-flow oxygen therapy (all starts)
  - i. Ongoing assessment of patients requiring > 6L/min oxygen
  - ii. Initiation and maintenance of OPTIFLOW system

- iii. Assist with internal or external transports of high-flow  $\text{FiO}_2 > 0.50$  patients

### **3. Ventilatory Support:**

- a. Initiation, maintenance and discontinuation of invasive mechanical ventilation
- b. Humidification of gases during ventilatory support, passive (HMEF) or active (heated humidifier) – including routine and PRN changes of HMEF when in situ
- c. Initiation, maintenance and titration of long-term or permanent ventilation, and facilitation for discharge home
- d. Regular monitoring and ongoing adjustment of ventilatory support
- e. Assessment of weaning parameters and initiation of weaning protocol as per [Weaning Protocol for ICU/CCU](#)
- f. Manual resuscitation
  - i. Ensure PEEP valve is set appropriately
  - ii. Ensure clean filter is attached
- g. Initiation, maintenance and discontinuation of non-invasive mechanical ventilation
- h. Provision of advanced ventilation modalities (i.e. HFOV)
- i. Assist with internal or external transports of ventilated patients
- j. Maintenance of ventilation protocols while on ECMO
- k. Ventilator circuit changes PRN (i.e. when grossly contaminated or when circuit malfunctions)

### **4. Bronchodilator and Nebulized Drug Therapy:**

- a. Initiation and assessment of Metered Dose Inhaler medications within the ventilator circuit (shared with nursing)
- b. Initiation and assessment of nebulized medications within the ventilator circuit
  - i. Antibiotics
  - ii. Flolan
  - iii. Mucolytic

### **5. Specialty Gas Administration:**

- a. Heliox Therapy
- b. Nitric Oxide delivery
- c. Isoflurane delivery via 900C ventilator

### **6. Cardiac Arrest Management:**

- a. Respond to all cardiac or respiratory arrests within ICU and CCU
- b. Respond to all Code Blue calls within SPH and MSJH
- c. Assist with cardiac arrest management within the OR, ED, or CSICU if requested

### **7. Diagnostic and Special Procedures:**

- a. Arterial Blood Gas Punctures
- b. Arterial line insertion
- c. Capnography for patients without an artline (ventilated patients)
- d. Oximetry (shared with nursing)
- e. Overnight oximetry studies

- f. Sputum collection and induction
- g. MIP or VC measurements
- h. Assist with percutaneous tracheotomy
- i. Assist with bronchoscopy
  - i. In CCU it must be an ICU physician or Respiriologist\* performing the procedure

**NOTE:** If the Respiriologist is performing the bronchoscopy, one of the Respiratory Therapists trained for the Bronchoscopy Suite will assist.

#### **8. Other:**

- a. Patient and family education and teaching
- b. Multidisciplinary education and inservices
- c. Discharge planning
- d. Provide support to NICU as needed
- e. Maintenance and restocking of Crash Cart buckets
- f. Maintenance and restocking of Transport Box respiratory component
- g. Act as a preceptor to Respiratory Therapy students

### **DOCUMENTATION:**

The Respiratory Therapist will ensure all relevant information is documented for both communication and legal purposes.

Documentation of Respiratory Therapy interventions and subsequent patient response will be done on a Critical Care Respiratory Therapy Flowsheet for all ventilated patients (invasive or non-invasive), those with an artificial airway in-situ, and anyone receiving specialty gas therapy (i.e. Heliox) or other ventilatory adjuncts (i.e. Optiflow). A new Flowsheet will be stamped, dated, and changed every 24 hours, including completion of the ventilator tear-off tabs for statistical purposes.

All medications administrated by the Respiratory Therapist will be appropriately signed off on the Medication Administration Record.

A Patient History Report – Respiratory Services Critical Care Kardex will be initiated for all patients and completed on a shift to shift basis.

A Workload Report Form must be completed at the end of each shift.

### **COMMUNICATION:**

The Respiratory Therapist(s) responsible for ICU will carry designated pagers and be available to the unit on a 24-hour basis. At SPH, one ICU therapist will carry a designated CCU pager, and provide service to that area upon request.

End of shift report must be provided to the oncoming therapist accepting care during a change

of shift, and should include a full patient history and relevant information about current or expected patients. Any pertinent equipment or supply concerns, or other relevant issues should also be communicated.

The wards therapist will be notified of all CPAP, airway or high-flow oxygen patients that are transferred out of ICU or CCU, as well as any patients that may require follow-up. A full patient history report will also be provided to the therapist accepting care during a patient transfer to another area.

Daily rounds in the ICU (and for ventilated patients in the CCU) start at 0830 and 2100. The Respiratory Therapist will be an active participant on rounds and present both a respiratory assessment and a plan for all patients they are following. At SPH, the Charge Therapist will also attend "Board Rounds" with the CNL and attending physicians.

## **EQUIPMENT AND SAFETY CHECKS:**

The Respiratory Therapist will check daily the operational capabilities of the required respiratory equipment and for the presence of adequate supplies as per the ICU Respiratory Checklist, and initial the checklist log as having been completed.

Any equipment which is non-functional, faulty or requires maintenance must be sent to Biomedical Engineering with a completed Maintenance Requisition form. If equipment fails operation while it is being used on a patient, an Incident Report should be completed (in addition to the Maintenance Request form) using the online Patient Safety and Learning System available via the PHC Intranet.