



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

<b>Department:</b>	Respiratory Care Services		
<b>Document:</b>	Multidisciplinary Policy And Procedure		
<b>Title:</b>	Use of Equipment		
<b>Applies To:</b>	Respiratory Theparist, Physicians And Nurses		
<b>Preparation Date:</b>	January 08, 2025	<b>Index No:</b>	RT-MPP-001
<b>Approval Date:</b>	January 22, 2025	<b>Version :</b>	2
<b>Effective Date:</b>	February 22, 2025	<b>Replacement No.:</b>	RT-MPP-001(1)
<b>Review Date:</b>	February 22, 2028	<b>No. of Pages:</b>	04

## 1. PURPOSE:

- 1.1 To define the guidelines and general policies governing the control, maintenance and use of Respiratory Therapy Medical Equipment.

## 2. DEFINITONS:

- 2.1 **Medical Capital Equipment** - term applicable to devices applied in Healthcare environment that are used to diagnose, treat or support patients throughout their treatment course. The maintenance of such devices falls under responsibility of Biomedical Engineering Department.
- 2.2 **Biomedical Engineering Control Number** — unique, numeric identification tags issued and affixed to all medical equipment that fall under biomedical engineering maintenance responsibility. These numbers are issued for each new piece of medical equipment received and accepted through the biomedical department and are affixed prior to distribution to the controlling/ user department. This control number along with the device serial number, and/ or hospital property tag number will be used for tracking and control purposes

## 3. POLICY:

- 3.1 Accountability: Ventilator adjustments/management is limited to the following individuals who have training and competency evaluations of the Ventilators.
  - 3.1.1 Licensed RCPs.
  - 3.1.2 NICU/ PICU/ MICU Physicians.
- 3.2 Special Consideration.
  - 3.2.1 A Licensed nurse who has undergone in-service orientation to the ventilator control panel may make ventilator changes limited to FiO2 changes only. Any changes made in FiO2 must be ordered by the physician. The nurse should also inform the Respiratory Therapist assigned and document in the patient's file.
- 3.3 Equipment and supplies assigned to or used by RCPs may be allocated to specific areas such as a Critical Care area but will remain under the control and supervision of Respiratory Therapy Department/ Nursing Department.
- 3.4 Medical Capital Equipment Inventories and Maintenance Records for RT equipment shall be maintained by the Biomed engineering department, per existing arrangements with BMD
- 3.5 During initial orientation, the Respiratory therapist will be tested for competency with regards to the operation and safe management of all life — supporting equipment assigned under Respiratory Therapy Department and within the employee's scope of responsibility.
- 3.6 All requests for borrowing of RT medical equipment shall be referred to the head of RT department or shift in — charge, as necessary. Fill - out the borrower's slip and logbook; then, reclaim the slip after returning the equipment.
- 3.7 Respiratory therapist may provide patient/family teaching associated with the current hospital patient, upon request from a physician, if comfortable with doing so and if said equipment is compatible with



hospital standard and safety regulations. If so performed, this teaching will be documented in the patient chart.

- 3.8 Under no circumstances will respiratory therapist accept privately purchase medical equipment for repair or in exchange for hospital equipment.
- 3.9 Unauthorized release of equipment (i.e. by physician or other service) must be reported to respiratory department. NOTE: RT staff are NOT responsible for recovery of such equipment.
- 3.10 Respiratory Therapy Staff will be expected to be able to provide basic, informal operational instruction for other disciplines that may be exposed to or share use of Respiratory Care equipment. Such items may include, but are not limited to:
  - 3.10.1 Flow Meters Medical Gas — Regulating Devices
  - 3.10.2 Compressed Gas Cylinders
  - 3.10.3 Oxygen Therapy Devices
  - 3.10.4 Manual Resuscitation Devices
  - 3.10.5 Mechanical Ventilators
  - 3.10.6 High Frequency Oscillators
  - 3.10.7 Nitric Oxide Delivery System
  - 3.10.8 Transport Ventilator
  - 3.10.9 Aerosol Delivery Devices
- 3.11 RT / nursing staff will report all equipment safety issues to BIOMED. Such concerns may include, but are not limited to:
  - 3.11.1 Exposed wires or compromised electrical connections.
  - 3.11.2 Equipment malfunctions.
  - 3.11.3 Damaged or distorted exterior casings.
  - 3.11.4 Loose or missing components, including atypical screws, control knobs, and wheels.
- 3.12 RT medical equipment may be used on consecutive patients only after it has been appropriately processed (example: cleaned, decontaminated and/or sterilized) in accordance with the departmental and/or facility standards.
- 3.13 All equipment shall undergo routine preventive maintenance in accordance with manufacturer's specifications or established hospital policy.
- 3.14 The Biomedical department will be responsible for providing preventive maintenance services, as well as for more detailed servicing, repairs and, maintenance of all RT medical equipment. Also, documenting all service interventions throughout the useful life of the device.
- 3.15 Damaged equipment will be presented/ processed for repair in a timely manner.
- 3.16 RT Staff will facilitate repairs by providing relevant information, as available.
- 3.17 RT and nursing staff will NOT attempt repairs that:
  - 3.17.1 Require opening the casing of the device or expose of the internal components.
  - 3.17.2 May further complicate the damage or problem.
  - 3.17.3 May place patients, visitors, self or colleagues at risk.
  - 3.17.4 May endanger or damage facility structures or systems.
  - 3.17.5 Require modification of designed features or manipulations of electronic components
  - 3.17.6 Are clearly beyond the scope of their experience or abilities.
- 3.18 Misuse/ abuse of equipment: all employees are expected to appropriately handle or apply departmental equipment
- 3.19 Any employee noted to misuse or abuse hospital equipment will be submitted to disciplinary action.

#### **4. PROCEDURE:**

- 4.1 Setting up for patient use
  - 4.1.1 Preparing for Patient Ventilation:
    - 4.1.1.1 Attach the breathing circuit and humidifier.
    - 4.1.1.2 Connect the air and oxygen hoses to the appropriate source gas supplies.
    - 4.1.1.3 Plug the ventilator power cord into AC power.
    - 4.1.1.4 Turn the ventilator ON. It will be on standby condition.



- 4.1.1.5 While standby:
  - 4.1.1.3.1 Perform a circuit check (follow the on — screen instructions).
  - 4.1.1.3.2 Touch sensors and perform the O2-sensor calibration.
  - 4.1.1.3.3 Perform the flow sensor calibration.
  - 4.1.1.4.1 Touch Patient set - up and enter selections for:
    - 4.1.1.4.1.1 Patient Category (Adult/ Infant)
    - 4.1.1.4.1.2 Ideal Weight
    - 4.1.1.4.1.3 Circuit Type
  - 4.1.1.4.2 Verify that ventilation parameters settings are appropriate.
  - 4.1.1.4.3 Verify safe alarm limits.
- 4.1.1.6 Touch the Start Ventilating button to begin breath delivery.
- 4.1.1.7 Connect the breathing circuit to the patient.
- 4.1.1.8 Observe and document the patient's condition.

## **5. MATERIALS AND EQUIPMENT:**

- 5.1 Borrowers Slip and Logbook
- 5.2 Biomed PPM Sticker
- 5.3 Respiratory Care Equipment

## **6. RESPONSIBILITIES:**

- 6.1 Staff Nurses
- 6.2 Physicians
- 6.3 Respiratory Therapist

## **7. APPENDICES:**


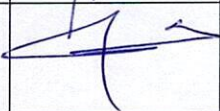
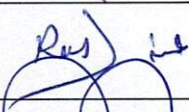


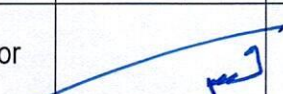
- 7.1 N/A

## **8. REFERENCES:**

- 8.1 Respiratory Care Equipment Operational Manual.
- 8.2 AARC Clinical Practice Guidelines; Respiratory Care; 1992; 37:882-886 Patient — Ventilator System Checks.
- 8.3 Hess, Dean R. et al, Respiratory Care Principles and Practice, W.B Saunders Company, St. Louis, 2002.



## 9. APPROVALS:

	Name	Title	Signature	Date
Prepared by:	Ms. Mary Joice Pena	Respiratory Therapist		January 08, 2025
Reviewed by:	Mr. Hassan Aldahkil	Head of Respiratory Therapy Department		January 12, 2025
Reviewed by:	Mr. Sabah Turayhib Al Harbi	Director of Nursing		January 13, 2025
Reviewed by:	Mr. Abdulelah Ayed Al Mutairi	QM&PS Director		January 14, 2025
Reviewed by:	Dr. Tamer Mohamed Naguib	Medical Director		January 15, 2025
Approved by:	Mr. Fahad Hezam AlShammari	Hospital Director		January 22, 2025