

**GRACE HOSPITAL
2307 W. 14TH STREET
CLEVELAND, OHIO 44113**

POLICY & PROCEDURE:		POLICY #:	PAGE 1 of 3
DEPARTMENT:	Rehabilitation/ Respiratory	EFFECTIVE DATE:	11/96
SUBJECT:	Placement of PMV or Occlusion of Tracheostomy Tube	REVISION DATE(S):	10/05, 1/06, 1/12, 10/12, 7/14
APPROVALS:	B. Moran RN, CCO/CNO	REVIEW DATE(S):	9/99; 1/02, 12/02, 10/05, 1/06, 1/08, 6/11, 1/14

POLICY: To assure proper placement of Passy-Muir Valve (PMV) or Occlusion of Tracheostomy (Trach) Tube

PURPOSE: To improve communication, facilitate secretion management, improve swallowing and to assist with weaning from the ventilator for those patients who are tracheostomized and/or ventilator dependent

PROCEDURE:

1. Obtain a physician's order for Passy-Muir Valve. The Passy-Muir Valve (PMV) will be available in the Rehab Services Department following a physician's order, as clinically evaluated and indicated by the Physician, Respiratory Therapist, Speech-Language Pathologist, and/or Nurse.
2. Clinical Indications:
 - a. Minimum 48 hours post-tracheostomy placement
 - b. Patient is alert and responsive.
 - c. Patient has stable vital signs. (HR, RR, BP, SpO2)
 - d. Patient is able to tolerate cuff deflation.
3. Contraindications:
 - a. Patient with a foam-cuffed tracheostomy tube
 - b. Patient who is unable to tolerate cuff deflation
 - c. Severe upper airway obstruction
 - d. Medical Instability
 - e. Severe Aspiration Risk
 - f. Relative Contraindication – Thick Excessive or otherwise unmanageable secretions
4. The Respiratory Therapist and Speech-Language Pathologist may schedule a joint session to initially place / evaluate the appropriateness of the utilization of the PMV as needed.
5. The Respiratory Therapist and / or Speech-Language Pathologist will describe the mechanics and utilization of the PMV to the patient, staff, and / or family members present.
6. The Respiratory Therapist and / or Speech-Language Pathologist will affix warning label to the pilot line of the patients cuffed tracheostomy tube prior to PMV placement.
7. The Respiratory Therapist and / or Speech-Language Pathologist will observe patient's baseline status including HR, RR, SpO2 and work of breathing.
8. Ensure patient is in a comfortable position (Semi-fowler to Fowler when possible) and ensure optimal tracheostomy tube positioning.
9. FOR NON-VENTILATOR DEPENDENT PATIENTS:
 - a. The Respiratory Therapist or Speech-Language Pathologist will deflate the cuff completely, and suction the trach / oral cavity as needed.

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- b. The Speech-Language Pathologist will instruct the patient to inhale. On exhalation the tracheostomy tube will be occluded manually with a gloved finger and the patient will be instructed to vocalize on the exhalation phase several times to insure airway patency.
- c. Initially the Speech-Language Pathologist or Respiratory Therapist will place the PMV on the hub of the trach tube by gently stabilizing the tracheostomy tube with one hand and attaching the PMV with the other hand using a ¼ twist.
- d. The Respiratory Therapist and/or Speech-Language Pathologist will monitor the patient's tolerance of the PMV throughout the trial and evaluate the patient's respiratory status looking for signs of fatigue, hemodynamic changes and SPO2 changes. Discontinue PMV use if patient shows signs of respiratory distress or a significant change from baseline status.
- e. Verbalizations / vocalizations will be elicited utilizing techniques as needed.
- f. At the completion of the trial, the Respiratory Therapist or Speech-Language Pathologist will remove the PMV by placing one hand on the tracheostomy neck plate and with the other hand will gently twist the PMV off the hub of the tracheostomy tube.
- g. After the trial, the Respiratory Therapist or Speech Language Pathologist will re-inflate the cuff, as appropriate.

10. FOR VENTILATOR-DEPENDENT PATIENTS:

- a. The Respiratory Therapist may readjust the ventilator alarms. At NO time should the alarms be completely disabled.
- b. The Respiratory Therapist or Speech-Language Pathologist will deflate the cuff completely, and suction the trach / oral cavity as needed.
- c. The Respiratory Therapist and/ or Speech-Language Pathologist will place the PMV in line with the ventilator removing HME. Utilize 15mm x 22mm adapter as needed to attach PMV to in-line suction catheter.
- d. The Respiratory Therapist will adjust the sensitivity to prevent autocycling, but still allowing the patient to trigger the ventilator.
- e. The Respiratory Therapist may turn off or lower PEEP to reduce/eliminate autocycling.
- f. The Respiratory Therapist may adjust the Pressure Control (PCP) / Tidal Volume (Vt) / Pressure Support (PS) as needed to maintain peak inspiratory pressure (PIP) to baseline prior to deflating the cuff to maintain patient comfort and stability throughout the trial.
- g. Cuff deflation/PMV placement will cause low expiratory volume alarms to alert. The Respiratory Therapist and/or Speech-Language Pathologist will remain with the patient throughout PMV trial to monitor that alarm. Alarm may be silenced for 120 second period with direct patient monitoring.
- h. The Respiratory Therapist, Speech-Language Pathologist, and / or Nurse will assess the patient's respiratory status looking for signs of fatigue, hemodynamic changes and SPO2 changes. . Discontinue PMV use if patient shows signs of respiratory distress or a significant change from baseline status.
- i. At the completion of the trial, the Respiratory Therapist or Speech-Language Pathologist will remove the PMV from the ventilator circuit, replace HME. Respiratory Therapist will return the patient to his/her previous ventilator settings as appropriate and then re-inflate the cuff.

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11. Cleaning procedure
 - a. Clean Passy Muir Valve with pure mild soap and tepid to warm water as needed.
 - b. Allow to air dry in storage container with lid open.
12. PMV is for single patient use. The valve should be replaced if it becomes noisy or vibrates.
13. If a Speech-Language Pathologist has passed the competency for tracheal suctioning, inflating and deflating the tracheostomy tube cuff, the Speech-Language Pathologist can share in this function. The competency test will be administered and evaluated by respiratory staff.
14. PMV will be stored in storage container labeled with patient identification information.